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SUMMARY AND EVALUATION OF

LONG TERM FORECASTS OF THE SUPPLY AND DEMAND OF AGRICULTURAL AND LIVESTOCK PRODUCTS IN

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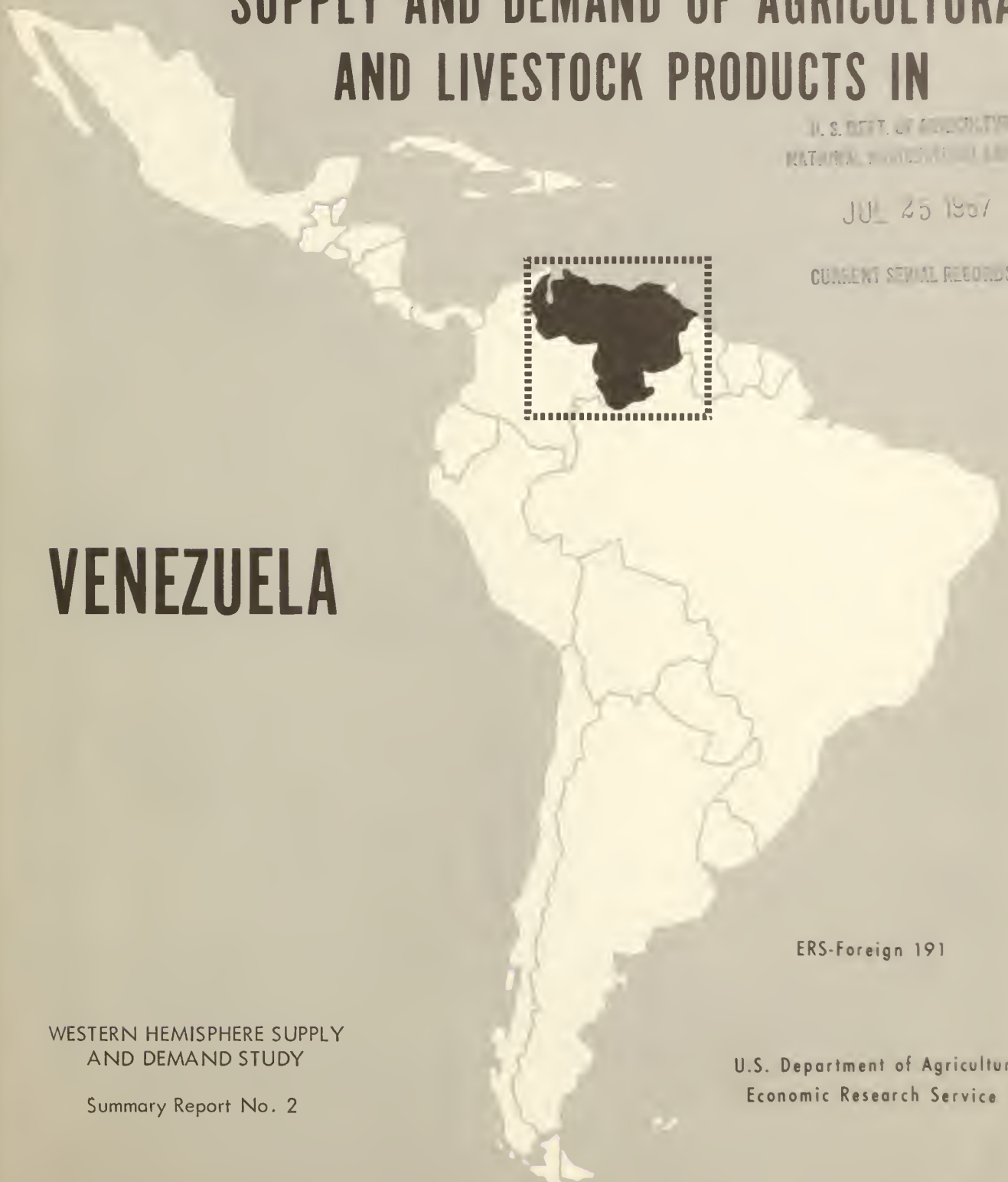

VENEZUELA

ERS-Foreign 191

WESTERN HEMISPHERE SUPPLY AND DEMAND STUDY

Summary Report No. 2

U.S. Department of Agriculture
Economic Research Service

VENEZUELA

International boundary

State or territory boundary

National capital

State or territory capital

Railroad, selected

Road, selected

KEY TO NAMES OF STATES

1. ZULIA
2. TRUJILLO
3. MÉRIDA
4. TÁCHIRA
5. FALCÓN
6. LARA
7. PORTUGUESA
8. BARINAS
9. APURE
10. YARACUY
11. CARABOBO
12. COJEDES
13. ARAGUA
14. DISTRITO FEDERAL
15. MIRANDA
16. GUÁRICO
17. NUEVA ESPARTA
18. SUCRE
19. ANZOÁTEGUI
20. MONAGAS
21. BOLÍVAR

TERRITORIES

22. DELTA AMACURO
23. AMAZONAS

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Washington, D. C. June 1967

SUMMARY AND CONCLUSIONS

The population of Venezuela, totaling 7.6 million according to the 1961 census, was projected to increase to approximately 8.8 million in 1965 and 11 million in 1975. The annual projected rate of increase was 3.2 percent, with rural population shifting from 43 percent of the total in 1961 to 30 percent in 1975.

Gross domestic product (GDP) was projected to increase 6.8 percent per year between 1960 and 1975, but has increased at only 5.0 percent per year between 1960 and 1965. Per capita GDP was projected to increase almost 72 percent between 1960 and 1975, 3.6 percent annually, but increased only 2 percent per year between 1960 and 1965. Projected GDP for 1975 may not be overly optimistic since Venezuela has the necessary means to carry through its development plans.

Rising per capita incomes and expanding population were expected to increase the demand for larger quantities of food and for higher quality, more nutritious foods. Increases in the projected domestic demand for all commodities except cassava and beans were at rates exceeding projected population growth.

Agricultural self-sufficiency is a major policy goal of Venezuela. The study expected this goal to be achieved by 1975 for the 22 commodities or commodity groups covered, except for seasonal shortages, lagging output of some commodities, and Temperate Zone commodities not well suited for production in Venezuela.

Venezuela was expected to continue to export 4 of the 22 commodities through 1975--bananas, plantains, cocoa beans, and coffee. In addition, beef exports were projected by 1975. However, cocoa bean and coffee bean exports were projected to decline slowly through 1975. High production costs were expected to limit export opportunities for most other agricultural products.

Venezuela was expected to be relatively self-sufficient in the production of 8 commodities by 1975: rice, sugar, potatoes, cassava, pork, poultry, eggs, and tobacco. Therefore, U.S. exports of these commodities to Venezuela were expected to be zero or insignificant.

Projections to 1975 indicated that Venezuela was expected to provide a generally growing market for 9 of the 22 study commodities--wheat and wheat flour, corn, barley and malt, oats and products, pulses, fats and oils, milk products, cotton, and seed potatoes. Imports of other agricultural commodities may be required to meet seasonal deficits.

Venezuela was the second largest U.S. market in Latin America for total and agricultural exports during 1960-66. U.S. imports from Venezuela increased from $396 million in 1950-54 to $937 million in 1960-64, while U.S. exports to Venezuela went from $476 to $524 million. Agricultural imports declined from $42 million to $20 million; however, agricultural exports increased from $70 to $80 million. Data for 1965-66 indicate total imports averaging $1,024 million; exports averaging $606 million; agricultural imports $20 million; and agricultural exports $79 million. Principal agricultural imports were coffee, cocoa beans, sugar, and plantains. About three-fourths of U.S. agricultural exports were supplied by 9 commodities: wheat and flour, feed grains, dairy products, fruits and preparations, vegetables and preparations, fats and oils, eggs, barley and malt, and meat and meat products.

Study projections indicated potential increases for U.S. agricultural trade with Venezuela. Larger availabilities were indicated for bananas and plantains, but smaller supplies of coffee and cocoa would be available. Of the 9 principal U.S. exports to Venezuela, grains, dairy products (dried skim milk), and fats and oils were projected to show the sharpest increases. Study estimates were not given for fruits and vegetables and preparations, but opportunities will likely continue for U.S. exports to cover Venezuela's seasonal shortages and to supply Temperate Zone products.

SUMMARY AND EVALUATION OF "LONG TERM FORECASTS OF THE SUPPLY AND DEMAND OF AGRICULTURAL AND LIVESTOCK PRODUCTS IN VENEZUELA"

By
John Earl Hutchison
Agricultural Economist
Western Hemisphere Branch
Foreign Regional Analysis Division
Economic Research Service

INTRODUCTION

This report is a summary and evaluation, with implications for U.S. agriculture, of the study report, Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, dated December 1965. 1/ The study report was prepared by the Consejo de Bienestar Rural (CBR) under a contract with the Economic Research Service of the U.S. Department of Agriculture. The contract was administered by the Western Hemisphere Branch, Economic Research Service of the Department.

Venezuela, the sixth largest country in South America, is bordered by the Caribbean Sea, the Atlantic Ocean, Guyana, Brazil, and Colombia. The total land area in Venezuela is over 352,000 square miles, about one and a half times as large as the State of Texas. The 1961 census indicated a population exceeding 7.5 million persons, with over half (57 percent) living in towns or cities of 5,000 or more inhabitants.

Per capita food consumption in Venezuela is low compared with that in many other Latin American countries and other countries of the world. Venezuela is a developing country, however, where economic activity and industrialization are expanding. Its average per capita income is the highest in Latin America, but there is a wide spread between the high incomes of the few and the near-subsistence level of the majority of its population.

In 1964, petroleum accounted for most of the country's exports, and for 29 percent of the gross domestic product (GDP) 2/ at market prices. Services accounted for 26 percent of the GDP, commerce for 14 percent, industry 12 percent, and agriculture 7 percent.

Principal agricultural exports are coffee, cocoa beans and products, sugar, and plantains.

1/ The complete study report may be requested from the Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250.

2/ The United Nations' Yearbook of National Accounts Statistics, 1964, defines gross domestic product at market prices to be "the market value of the product, before deduction of provisions for the consumption of fixed capital, attributable to factor services rendered to resident producers of the given country. It is identically equal to the sum of consumption expenditure and gross domestic capital formation, private and public, and the net exports of goods and services of the given country. It differs from the gross national product at market prices by the exclusion of net factor incomes received from abroad." The original study report incorrectly labeled GDP as gross national product.

Nine commodities or commodity groups constitute about three-fourths of U.S. agricultural exports to Venezuela: wheat and flour, dairy products, feed grains, fruits and preparations, vegetables and preparations, fats and oils, eggs, barley and malt, and meat and meat products.

Venezuela ranked second among Latin American markets for U.S. agricultural products during 1960-66. It also ranked second as a Latin American market for all U.S. exports. In 1965, agricultural exports accounted for $76 million or 12 percent of the $621 million of U.S. exports going to Venezuela; imports totaled $18 million or less than 2 percent of the total of $1,024 million. Preliminary data for 1966 indicate agricultural exports of $82 million, 14 percent of the $592 million total, and agricultural imports of $22 million, 2 percent of the $1,025 million U.S. imports to Venezuela.

Study Objectives

The major objective of the CBR study was to establish projections of import demand in Venezuela in 1965, 1970, and 1975 for selected agricultural commodities. Subsidiary objectives were to project growth of the economy of Venezuela and to project domestic demand for and supply of selected agricultural commodities in Venezuela.

The 22 commodities or commodity groups covered in the CBR study were wheat and wheat flour, corn, rice, barley and malt, oats and products, sugar, potatoes, cassava, pulses, bananas, plantains, cocoa beans, beef and veal, pork, poultry, fats and oils, milk and milk products, eggs, coffee, cotton, tobacco, and seed potatoes. Integrated projections were made of the domestic demand, domestic supply, and import demand or export availability of these commodities for 1965, 1970, and 1975.

Summary Objectives

Objectives of this report are to summarize, analyze, and evaluate the CBR study; update and evaluate selected parts of study data where more recent data have become available; and analyze the implications of the study report for U.S. agriculture as related to trade. Projections for the study commodities are evaluated and Venezuelan imports of a few additional commodities not covered in the study, such as fruits and vegetables, are examined briefly.

ECONOMIC PROJECTIONS

Population

Population figures for Venezuela were estimated in the study report for 1965, 1970, and 1975 by the "component method" utilized by the United Nations. This method, based on the life expectancy theory, projects separately the number of males and females by age groups, allowing mortality and birth rates to vary with each age group. Census figures for 1936, 1941, 1950, and 1961 were used to compute trends and three hypotheses were used to project population.

Hypothesis one assumed no change in present birth and death rates between 1960 and 1975.

Hypothesis two assumed no change in life expectancy before 1965, but an increase of 2.6 years by 1970 and an additional 2.4 years by 1975. The assumed birth rate remained stable through 1965, then decreased at the rate of 0.5 percent annually through 1975.

Hypothesis three assumed an increase in life expectancy of 2.6 years by 1965, an additional increase of 2.4 years by 1970, and a further increase of 3.5 years by 1975. The birth rate was assumed to decrease 0.5 percent yearly from 1960 through 1970 and then to decrease 1.0 percent annually through 1975.

The estimated population figures for 1975 under the three hypotheses were: hypothesis one, 12,276,000 persons; hypothesis two, 11,812,000 persons; and hypothesis three, 11,918,000 persons. Hypothesis two was selected as the most reasonable forecast and its estimates were used for projecting supply and demand as well as for determining the labor force and per capita income figures (table 1). The growth rate between 1965 and 1975 was 3 percent per year.

The future composition of the population was projected by rural and urban population. Linear extrapolation was used to project rural population which was defined as those persons living in areas of less than 5,000 inhabitants. Urban population equaled the difference.

Rural population, relatively constant in the past, was projected to increase from 3.2 million in 1961 to 3.5 million in 1975. Urban population, on the other hand, increased sixfold between 1936 and 1961, and was expected to increase from 4.3 million in 1961 to 8.3 million by 1975. The projected urban population in 1975 will comprise over 70 percent of the country's population.

The labor force was defined as all persons between 15 and 64 years of age, while the active labor force was defined as all persons employed or looking for work; these were projected for 1965, 1970, and 1975 using projected population figures derived from hypothesis two (table 2). The percentages of males and females in the labor force and active labor force were taken from the 1961 census and applied to the projected population figures for 1965. The 1961 percentage of the active labor force was adjusted upwards for 1970 and 1975 projections. On this basis, the labor force was expected to increase from 4.5 million in 1965 to 6.4 million in 1975. The active labor force was projected to increase from 57 percent in 1965 to 63 percent of the labor force in 1975.

Hypothesis two provides the most conservative projection of population. If population actually grows faster than 3 percent per year, the projected labor force and projected demand will need to be increased.

Income

GDP was projected to 1965, 1970, and 1975 for eight major economic sectors: Agriculture; mining and hydrocarbons; industry; construction; electricity; transportation and communications; commerce; and services (table 3). Projected figures were given in 1957 prices. Historical trends in these sectors for 1950-59 were used as basic reference points to determine the expected rates of growth, since the years 1960 and 1961 were considered atypical depression years. However, the average annual compound growth rates for 1950-59 were used with 1961 as the base year for income projections.

Four projections of GDP were made, based on different hypotheses regarding the expected future rates of growth for each sector. Sector projections were then aggregated.

Hypothesis one assumed that the contribution to GDP by each sector would continue to grow as it had between 1950 and 1959.

The assumptions used for hypotheses two, three, and four are presented below by economic sector.

Agriculture.--Hypothesis two used an increase of 8 percent annually, the growth rate given for the 1963-66 National Plan. This rate can be achieved only if the irrigation plans prepared by the Ministry of Public Works are completed and agrarian reform is intensified. Hypothesis three assumed an increase of 60 percent in the fixed gross investment (FGI) between 1961 and 1965, followed by a leveling off to the historical rate between 1965 and 1975. Hypothesis four assumed the largest probable growth rate of 8 percent, the same rate used in hypothesis two.

Mining and hydrocarbons.--Hypothesis two assumed the historical growth rate. Hypothesis three assumed the petroleum industry would diminish in importance relative to the total sector; petroleum was assumed to grow at 4 percent while the rest of the sector continued at the historical rate. Hypothesis four assumed the largest probable growth rate.

Industry.--In hypothesis two the growth rate was assumed to be slightly lower than that called for in the 1963-66 National Plan. This rate implies a continuation of Government protection and development for industry. Hypothesis three assumed the historical growth rate. Hypothesis four used the same rate as hypothesis two.

Construction.--For hypotheses two, three, and four the historical growth rate was considered to be too low. The construction industry was in a slump during the years used to determine the growth rates. Thus, a growth rate of 8 percent was considered more reasonable and was used for all three hypotheses.

Electricity.--The annual historical growth rate of 18.12 percent was considered a minimum for this sector and was maintained for all four hypotheses.

Transportation.--The historical growth rate was used in all four hypotheses.

Commerce.--The commerce sector was considered to be in a period of readjustment; thus the historical growth rate of 8 percent was thought to be too high. A rate of 5.2 percent was considered to be more realistic and was used for hypotheses two, three, and four.

Services.--Services were considered to have reached a saturation level. The growth rate of the service sector was lowered from the historical rate of 7.45 percent to 5.25 percent and was used for the last three hypotheses.

Each of the four estimates of GDP derived from the aggregation of the sector incomes was tested by projecting the fixed gross investment necessary to support the projected GDP. The labor requirements for each hypothesis, based on past productivity, were compared with the projected labor force. On the basis of these considerations, the lowest estimate of GDP under hypothesis three was selected as the most reasonable estimate of future GDP (tables 3 and 4).

Total projected per capita GDP under hypothesis three was used to determine per capita disposable income (DI), and changes in DI were used with income and price elasticities to derive projected per capita and total consumption (table 5). Per capita DI through 1975 was assumed to have the same relationship to GDP as in 1950-61. Other measures of income were also calculated. Per capita personal disposable income for the rural sector was projected to increase slightly over 100 percent between 1960 and 1975, while that of the urban sector was to increase 40 percent for the same period.

Between 1950 and 1965, the fastest growing sector was the electrical sector, while the construction sector experienced the greatest fluctuations (tables 6 and 7). The agricultural sector increased at annual rates between 0.3 percent and 14.0 percent, with final projections being made at almost 6 percent. Total GDP fluctuated between 1.3 and 11.7 percent over the historical period and was projected to increase at an annual rate of around 7 percent through 1975.

A comparison of recent data and trends with projected GDP indicates that projected GDP for the total economy and most of the sectors is overly optimistic for 1965. Only the 1965 projections of GDP contributed by the agricultural and service sectors appear to be in line with recent trends. The other sectors have not grown as fast as was expected. Actual GDP for 1970 and 1975 may also be somewhat lower than the projected levels unless total investment in the respective sectors increases sharply.

Venezuela was not expected to have any major limitations relating to foreign exchange, which was assumed to be available and adequate to meet all necessary commodity purchases (table 8). The petroleum sector provides most of the country's foreign exchange, and petroleum reserves should remain adequate throughout the study period.

AGRICULTURAL DEMAND PROJECTIONS

Methodology

Demand for selected agricultural commodities in Venezuela was projected for 1965, 1970, and 1975. Two models were used: one using time series analysis and one using the results based on the National Survey of Family Income and Expenses in Venezuela. 3/ Where possible, projections were made by both methods. The results were then analyzed and the most likely projections were selected to develop the total quantity demanded. Demand estimates included both food and nonfood uses for direct and indirect consumption.

The time series model used data on production, import and export trends of the selected commodities, and population to arrive at per capita and total apparent consumption. Food and nonfood use and direct and indirect consumption were considered, and in a few cases adjustments in income-consumption relationships were made. A straight trend line was fitted to the data. The years 1945 to 1961 were used as the reference period, with 1945 serving as the base year.

The National Survey of Family Income and Expenses was conducted in 1962 to provide needed data for use in the second model. For survey purposes, Venezuela was divided into eight areas and families were stratified into three major groups: rural population, represented by towns of less than 5,000 inhabitants; intermediate urban, by towns of 5,000 to 25,000 inhabitants; and urban population, by towns of more than 25,000 inhabitants. A two-stage sampling technique was used to select the families composing the sample. Each family was equally likely to be selected.

A sample of 4,000 families was selected: 2,700 families from the urban zone, 390 from the intermediate urban area, and 910 families from the rural area. A total

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3/ Carried out jointly by the Ministry of Development, the Central Bank of Venezuela, the Office for Coordination and Planning of the Presidency of the Republic, and the CBR in 1962 as part of the contract study.

of 3,752 family questionnaires was included in the final sample. The breakdown, by zone, of acceptable questionnaires was as follows: urban zone, 2,639; intermediate zone, 324; and rural zone, 789.

The sample was taken during August and September 1962. The questionnaire covered family size, employment, income, purchases of selected commodities (over a 1-week period), prices paid, other major expenses, and types of housing. The data thus collected from the sample were analyzed and adjusted for desired time periods. Per capita consumption and income and price elasticities were computed from the sample data and adjusted for use in the second projection model (table 9).

The appropriate data were used in the second model to project per capita consumption by commodity for rural and urban sectors in 1965, 1970, and 1975:

$$C_t = C_o \left(1 + \frac{I_t - I_o}{I_o}\right)^{E_I} \left(1 + \frac{P_t - P_o}{P_o}\right)^{E_p}$$

Where:

C = quantity per capita consumed (in 1962 as determined by the family survey).

I = per capita disposable income.

P = price of article in constant bolivares.

t = target years 1965, 1970, and 1975.

o = generally 1962, except for some prices where an adjusted historical series (1945-61) was used for projections. In these cases a straight line was fitted to the series and the estimated values were used for o and t.

E_I = quantity income elasticity.

E_p = quantity price elasticity.

The price changes $\left(1 + \frac{P_t - P_o}{P_o}\right)$ of all commodities, except powdered milk which remained constant, were positive. The largest price increases were in beans, domestic white cheese, beef, bananas, and cassava. The smallest price increases were expected in coffee, cooking hens, potatoes, vegetable oils, plantains, and wheat bread.

Per capita rural income was expected to increase faster than per capita urban income. Changes in per capita disposable personal income variables $\left(1 + \frac{I_t - I_o}{I_o}\right)$ used in the above equation for the rural sector were 1.2090 (1965); 1.5569 (1970); and 2.0042 (1975). The corresponding figures for the urban sector were 1.0061 (1965); 1.2039 (1970); and 1.4010 (1975).

Separate estimates were made for nonfood use and indirect consumption of items not covered by the survey. Survey results and other estimates were then consolidated.

Demand Estimates

Of the two models used to project demand, only the model based on the National Survey permitted an analysis of food consumption for rural and urban sectors. A brief discussion of the results is presented below.

Family Consumption Expenditures

The National Family Survey indicated that the rural population tended to consume more of the less processed commodities such as corn, cassava, beans, and noncentrifugal sugar, while the urban population consumed more processed commodities such as wheat flour and bread, centrifugal sugar, coffee, butter, and processed milk (table 9). The urban population tended to consume slightly larger quantities of food than the rural population.

All families in the sample spent the largest portion of their food expenditures on the meat and eggs group (table 10). However, the largest single expenditures for individual commodities were for beef and ground coffee. In both the rural and urban sectors the percentages of expenditures on sugar, beans, and rice were also relatively important. The rural sector allocated a larger percentage of its expenditures toward items such as corn, pastas, margarine, and cassava, while the urban sector spent larger percentages for processed milk, vegetable oils, fryer chickens, pork, and eggs.

As expected, the rural sector generally consumed more of the commodities with lower values and with less processing than the urban sector. Each of the two sectors generally allocated about 20 percent of expenditures to milk and milk products; 30 percent to meat and eggs; 30 percent to carbohydrates or starches (including beans); 12 percent to fats, oils, and sugar; and the rest to coffee, chocolate, and cigarettes. In volume, the largest consumption was of carbohydrates and starches, with relatively much smaller quantities of meat, eggs, and milk and products being consumed.

Elasticities

The income and price elasticities were derived from log-log relationships of the food consumption and expenditure data generated by the National Family Survey. No significant differences in elasticities between the urban and intermediate zones were apparent. The two zones were therefore combined into one urban zone by calculating separate elasticities for different income strata within the two zones and using a weighted average for final elasticities. Elasticities were also calculated for the rural zone.

The quantity elasticity of the commodity consumed with respect to total income was computed and weighted by per capita consumption in each income group.

The quantity elasticity of the commodity consumed in relation to the price of the commodity was computed and weighted by the total value of the commodity consumed in each income group.

The elasticity of total expenditures for each commodity consumed with respect to total income was computed and weighted by the number of observations in the survey for each income group.

The quantity-income and quantity-price elasticities were adjusted by multiplying them by the expenditure-income elasticity. The adjustments were made to account for the change in income distribution occurring in Venezuela, since income is now being more widely distributed than in the past.

The quantity-price elasticities determined by the Family Survey indicated how price changes affected consumption in the urban and rural sectors. There was little difference in the price elasticities of the two sectors for ground coffee, rice, powdered milk, centrifugal sugar, natural milk, corn, pastas, bananas, black beans, and national cigarettes. The rural sector tended to have somewhat lower negative price elasticities than the urban sector for eggs, pasteurized milk, other beans, lard, beef, hens, and fryer chickens. For these commodities, an increase in price would cause a

much faster decrease in rural consumption than in urban consumption. The reverse was true for oats, potatoes, butter, domestic white cheese, plantains, cassava, fresh fish, and centrifugal sugar. In the case of these eight commodities, an increase in price would cause rural consumption to decrease more slowly than urban consumption.

The quantity-income elasticities determined by the Family Survey also indicated differences between the rural and urban sectors. The differences were not as great for income elasticities as for price elasticities. For example, income elasticities for wheat bread and flour, pork, natural milk, powdered milk, beef, and hens were almost the same in the two sectors. The rural sector had considerably higher income elasticities for plantains and lard than the urban sector. Income elasticities for black beans, other beans, domestic white cheese, rice, powdered milk, cigarettes, eggs, oats, pastas, margarine, and cassava were also higher in the rural zone than in the urban zone, indicating that an equal change in income for the two sectors would increase rural consumption of these commodities faster than urban consumption. The urban sector had higher income elasticities than the rural sector for bananas, potatoes, ground coffee, vegetable oils, canned meat, and butter.

In summary, the income and price elasticities for commodities and sectors generally appear to be about what one would expect regarding their signs, magnitude, and relationships.

Demand Projections

Demand was projected using the time series model and the consumer survey model with adjustment, as necessary, for nonfood use and indirect consumption. The two results were compared, adjustments were made, and a final demand projection was selected.

Final projections of total demand for 1965, 1970, and 1975 showed general increases for all study commodities (table 11). Projections included direct and indirect consumption as well as animal feed and seed. On the basis of per capita consumption, only the demand projections for cassava and beans failed to show gains (table 12). Barley consumption in the form of beer was projected to increase the fastest, followed closely by wheat consumption measured in terms of flour, margarine, and edible oils. Pork, eggs, cotton fiber, seed potatoes, and potatoes for consumption were projected to increase 4.0 to 4.3 percent annually between 1965 and 1975. Consumption in the other 11 categories (milk, bananas and plantains, corn, sugars, beef, rice, vegetable fats, coffee, tobacco, and cocoa) was expected to increase annually between 1965 and 1975 at rates of 3.4 to 3.9 percent.

Bananas and plantains, corn, wheat, rice, and sugars comprised the largest volume of the Venezuelan demand for the commodities in this study. Cotton fiber, tobacco, margarine, and cocoa were the least important study commodities in terms of quantity.

Food demand projections indicated a shift in the proportion supplied by various commodities. Wheat was becoming more important than corn. More corn was being used for livestock feed while direct human consumption of corn was decreasing. Beer (barley) consumption was increasing in importance along with milk products, eggs, beef, and fats and oils. The relative importance of cassava, beans, rice, and pork consumption tended to remain stable or decrease over the projection period.

A comparison of apparent consumption data through 1964 with the 1965 projections indicated that only the projected demand for cassava, vegetable fats, and sugar is about in line with recent trends. Demand estimates have proved too high for milk, eggs, beef, potatoes, beans, barley, coffee, oats, tobacco, and margarine. Underestimates of demand have occurred for bananas and plantains, corn, wheat, rice, edible

oils, pork, raw cotton, cocoa, and poultry. Except for poultry and bananas and plantains, changes in stocks may account for some of the underestimation. Each commodity is discussed further in the section, "Agricultural Commodity Projections."

AGRICULTURAL SUPPLY PROJECTIONS

Study commodities were projected largely on the basis of historical production trends, with area harvested and yields being taken into consideration. Projections were then adjusted, usually on a judgment basis, considering future Government policies, land use, potential productivity, and projected demand. In the case of many commodities, the projected supply was assumed to be equal to the projected demand.

Agricultural policies, programs, land use, and productivity are discussed below in general terms; further detail is presented under individual commodity headings in the section, "Agricultural Commodity Projections."

Agricultural Policies and Programs

The Venezuelan Government, interested in assisting the agricultural development of the country, has as its general goal, self-sufficiency in agriculture. Future land use and agricultural production will depend largely on the emphasis placed by the Government on specific crops, including effective minimum producer prices, import controls, credit extension, and technical assistance; the continued development of the present agrarian reform programs; and the development of planned irrigation projects.

Venezuela's land resources are expected to remain adequate during the period of the study projections. Agricultural extension campaigns are in progress to encourage improved use of agricultural land, both that presently developed and the new land being developed. Increased production, sanitation, and management are being promoted and accepted. The Government is providing and improving existing facilities for agricultural credit, transportation, and marketing. Minimum prices for some agricultural commodities are maintained by the Government, and import controls are used to encourage domestic production.

The Government is also working to promote improved pastures and has placed controls on the imports of processed pork, dairy products, and eggs in the hopes of stimulating domestic production of these products.

An aggressive agrarian reform law, enacted in 1960, provides for Government purchase of large farms. This land and other available Government land are distributed to landless farmers. Improved housing coupled with some technical assistance and long-term credit also have been implemented. Through December 31, 1965, approximately 114,000 families were reported to have been settled on land under the Agrarian Reform Program.

Ambitious irrigation and land drainage projects are being planned and carried out by the Government. Present plans are to have over 324,000 hectares of land under irrigation or drainage projects by 1975. If these plans are carried through, about nine times the amount of such land that was available in 1961 will be available in 1975.

Land Use

In 1961, only 29 percent of the land area of Venezuela was in crop and livestock production units. Between 1950 and 1961, however, the land in farms increased over 18 percent (table 13). During the same period, cultivated areas increased almost 29 percent, with the land area in annual and semipermanent crops increasing much faster than that in permanent crops. In 1961, nonpermanent crops composed over 60 percent of the cultivated land area. Total pasture area increased almost 24 percent, with the land area in cultivated pasture increasing faster than the area in natural pastures. Fallow and idle croplands increased over 83 percent, while land in forests and woods increased very little, and other lands decreased.

The land area used to produce 18 of the study crops (representing about three-fourths of the total land in crops) has fluctuated in recent years and increased slightly (table 14). The total cultivated area for all crops increased much faster than for the 18 study crops. This suggests that crops not included in the study are increasing in importance relative to the study crops, when measured in terms of land area devoted to their production. Available data do not indicate which nonstudy crops are increasing, but they do show that land area in other fruits and vegetables, which account for much of the land in nonstudy crops, is increasing.

Of the 18 crops in the study, the land area devoted to sesame production increased the most between 1950 and 1964. Other increases (listed in descending order) occurred in cotton, rice, potatoes, corn, plantains, and beans. Decreases (listed with largest decrease first) occurred in the land area devoted to cassava, bananas, sugarcane, coffee, wheat, and coconut, while land in cocoa and tobacco remained constant.

Productivity

Yields per hectare for selected crops were computed and analyzed in the study's supply analysis (table 15). Historically, average yields have been increasing for sugarcane, potatoes, cassava, coffee, bananas, plantains, rice, and wheat. Average yields for corn, cotton, sesame, coconut, tobacco, beans, and cocoa have been decreasing. The total volume of production for all crops except beans, cocoa, and wheat generally increased over the period 1950-65, indicating that increasing land area has tended to offset any decline in yields (table 16). No correlation was found between farm prices and actual production.

Beef supply projections considered production in carcass weight, feed production, and time variables. Pork supplies were projected using production in carcass weight and time as the variables (table 17). Poultry and egg supply projections were made to equal projected demand, implicitly assuming considerable increases in productivity (table 18). Projected milk production, based on past trends, implied a relatively high rate of increase.

Beef production was projected to increase at an annual rate of 6.8 percent between 1961 and 1975, while pork production was to increase at only 3.3 percent yearly. Historical trends were adjusted to account for the increasing governmental help in the livestock industry and for increases in slaughter rates of beef. For example, between 1950 and 1961 the slaughter rate for beef increased from 8 to 12 percent of the herd and the average yield per head of beef slaughtered increased from 174 to 177 kilograms. Cattle numbers were projected to increase from 6.4 million head in 1961 to almost 9.0 million in 1975. The study did not elaborate further on changes in the production of beef, pork, poultry, eggs, or dairy products.

More research is needed regarding relative inputs and costs of production; relative productivity and net returns of each farm enterprise; and methods and costs of

marketing and distributing agricultural products in Venezuela. Until this type of data is available, any projection of supply will necessarily be limited. The study report suffers from this limitation.

In too many cases, projections of supply in the study were made to equal demand or were adjusted on the basis of too little information. Comparison of actual production with 1965 projections shows that the projected supply was apparently underestimated for plantains, corn, sugar, rice, coffee, cotton, cocoa, and poultry. Overestimations of supply appear to be the case for potatoes, sesame, beans, tobacco, copra, and pork, while projected and actual supply appear to be in line for bananas, cassava, coffee, wheat, and beef. However, the projections represent a 3- to 5-year average, and 1966 data when available need to be considered for a more valid comparison.

AGRICULTURAL COMMODITY PROJECTIONS

The end results of the CBR study were the projections of domestic demand, domestic supply, and ultimately import demand or export availability of 22 categories of food commodities. Study commodities have been grouped for summary purposes based on trade projections for 1975, except for pork and beef which are grouped according to 1965 projections. These divisions are presented below by individual commodity under the categories of export commodities, import commodities, and other commodities. Historical and projected demand, supply, and trade are discussed for each commodity. Tables 11, 12, 14-19, and 23 should be referred to.

Export Commodities

Study projections indicated Venezuela would have available for export bananas, plantains, cocoa, and coffee during 1965 through 1975, and beef in 1975.

Bananas and plantains

Banana production has fluctuated between 306,000 and 510,000 tons in recent years, while plantain production has generally increased. Venezuela exports both bananas and plantains. These exports were around 3,000 tons per year between 1951 and 1960, but increased to over 9,500 tons in 1963, over 11,300 tons in 1964, and over 12,100 tons in 1965.

The study projected that domestic demand, including nonfood use, for bananas would reach 410,000 tons in 1965 and 527,000 tons in 1975. Plantain demand was projected to be 361,000 tons in 1965 and to increase to 534,000 tons in 1975.

The study assumed that domestic demand for these products would be filled by domestic supply. It was thought that the planned drainage projects around the south zone of Lake Maracaibo would provide the potential surplus for increased exports. Therefore, the domestic supply projection was increased by 15 percent over the domestic demand to provide for possible exports.

Under these assumptions, exports of bananas and plantains were projected to reach about 116,000 tons in 1965 and 151,000 tons in 1975. These estimates appear to be high, especially for plantains, unless their international market improves considerably. According to U.S. trade data, Venezuela exported 4,600 tons of plantains to the United States in 1963, 6,800 tons in 1964, and 8,600 tons in 1965.

Cocoa

Cocoa beans, a traditional Venezuelan crop, are an important export item. Venezuelan cocoa is classified as fine quality.

Cocoa bean production fluctuated between 1950 and 1965, varying from 17,000 to 23,000 tons. The study projected a stable production of 15,000 tons of beans for 1965 through 1975, but excluded some unspecified bean production which is used to produce domestic chocolate.

Internal demand for cocoa has been increasing and was projected to increase from over 3,000 tons (bean equivalent) in 1965 to over 4,400 tons in 1975. Thus, almost 12,000 tons of cocoa beans in 1965 and just over 10,500 tons in 1975 would be available for export.

Actual cocoa bean production in 1964 and 1965 exceeded 20,000 tons, indicating the projection of 15,000 tons was overly cautious. However, the cocoa export figure in 1964 and 1965--just over 12,000 tons--was almost identical to that projected for 1965.

Coffee

Before petroleum achieved its importance in Venezuela, coffee was the main export product. It is still an export item, but coffee exports measured by volume or value have generally decreased in recent years.

Venezuelan coffee production has been relatively stable in the past while internal consumption of coffee has been increasing slightly faster than population growth. Consequently, net exports during recent years have been less than the quota which Venezuela has had under the International Coffee Agreement. To increase coffee production, however, would require large amounts of investment which, according to the study, Venezuelan coffee producers were not prepared to make. Barring Government help in financing new investments, the study projected a relatively stable future supply of coffee, permitting the supply to increase only 2,000 tons between 1965 and 1975. Domestic demand, however, was forecast to increase over 14,000 tons (from 34,000 to 48,000 tons) between 1965 and 1975, causing projected coffee exports to decrease from 21,000 tons in 1965 to 9,000 tons in 1975. Actual coffee production and exports in 1965 were very close to the projected figures.

Import Commodities

Study projections indicated that the total domestic demand for wheat, barley, oats, and seed potatoes would need to be filled by imports. In addition, various amounts of cotton, beef, pork, milk, corn, beans, and edible fats and oils would need to be imported to meet the projected domestic demand.

Wheat 4/

Wheat production in Venezuela is limited to a small area in the high Andean mountain region because of ecological reasons. The total amount of wheat production is insignificant (less than 0.5 percent of total demand). In spite of efforts to improve local wheat production, the total amount produced has decreased.

Imports of wheat and flour, however, have been increasing steadily as a result of the decline in domestic production, the increase in population, and the general trend

4/ Wheat and wheat products expressed in wheat equivalent.

of substituting wheat for corn in the diet. The installation of flour mills in 1958, coupled with the Government's protectionistic policies, have changed the composition of these imports. Before 1958, flour was the predominant import, but since 1958 wheat has become the predominant import, almost to the exclusion of flour imports.

The total demand for wheat was projected using the historical series of apparent consumption through 1961, while direct consumption of wheat (bread, flour, pastas, crackers, and pastries) was projected by using the Family Survey data. The difference in the two projections was the amount estimated for use in animal feeds. The projected use of wheat in animal feed increased faster than projected direct human consumption. A basic assumption was that the wheat proportion of grains included in livestock feed would not change. The total demand for wheat was projected to be 430,000 tons in 1965 and 744,000 tons in 1975. About 11 percent of the 1965 total wheat projection and 21 percent of the 1975 total wheat projection were for use in animal feeds. Except for the negligible amount of local production, both the animal and human demand will have to be met by imports or by a substitute product.

Recent data indicate that wheat production has leveled off at around 1,000 tons per year, and that imports have fluctuated, generally increasing, with record imports in 1965. Recent surpluses of rice have resulted in pressure to substitute some rice flour for wheat flour in bread production, and to restrict imports of wheat for animal feed to force feed manufacturers to use more byproducts of the milling industry. Production of manufactured feed, however, is increasing rapidly. The demand for food wheat and feed wheat, or a substitute for them, may exceed the study projections--1965 imports have already exceeded 1965 projections. Changes in governmental policies and relative prices will determine whether the demand will be filled by wheat or a substitute.

Barley

Because barley is not produced in Venezuela, most of the supply is imported in the form of barley malt and is used almost exclusively for the production of beer. Small amounts of barley are used for animal feed, largely race horses. Therefore, demand for barley was projected on the basis of demand for beer. Beer consumption has been increasing recently, providing a corresponding demand for malt imports. Converted to a barley equivalent, total demand for malt was projected to be 60,000 tons in 1965 and to increase to 107,000 tons in 1975. These projections were somewhat high and actual imports of malt in barley equivalent were only around 44,000 tons in 1965.

Oats 5/

Oats are also not produced in Venezuela and total needs must be supplied through imports. The major imports of oats are in the form of rolled oats, most of which are consumed by humans. Very little is fed to livestock. The total demand for oats in grain equivalent was projected to reach 23,000 tons in 1965 and 31,000 tons in 1975. These figures may need to be revised downward, at least until income growth achieves the projected rate, since imports of oats in 1965 were around 15,000 tons.

Seed potatoes

For ecological reasons Venezuela tends to import most of its seed potato requirements. The import demand for seed potatoes, estimated to be one-sixth of the projected domestic demand for potatoes, was projected at 22,000 tons in 1965, increasing to 33,000 tons in 1975. However, increased yields and more efficient use of imported seed

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5/ Oats and oat products expressed in oat equivalent.

have apparently reduced the demand for imported seed potatoes. In 1960-65, seed potato imports ranged from a high of 14,600 tons in 1961 to a low of 8,100 tons in 1964, averaging just over 9 percent of domestic production or about one-half the assumed seeding requirement. The reduced seeding rate and the lower actual production of potatoes than was projected may have lowered Venezuela's effective demand for seed potatoes.

Cotton

Cotton provides raw materials for both textiles and vegetable oil production. Cotton production and demand were projected on the basis of historical trends and then adjusted considering the following four points: Cotton, an irrigated crop in Venezuela, is included in the new irrigation plans; new varieties and practices are expected to increase yields to 900 kilograms per hectare; the Venezuelan textile industry, which provides the major demand for cotton, is protected by the Government; and producers are protected by a policy of minimum prices.

The domestic demand for lint cotton was projected to be 15,000 tons in 1965 and 22,000 tons in 1975. With the exception of the demand for long-staple cotton, the study assumed that domestic supply would meet domestic demand. Import demand for long-staple cotton was projected at 2,000 tons in 1965 and 4,000 tons in 1975.

Actual cotton production and imports in 1964 and 1965 exceeded 1965 projections. It appears that projected domestic demand and production were underestimated, with increased controls on textile imports contributing to the larger demand. However, cotton producers are trying to expand production to meet the demand for both long- and short-staple cotton. If they are successful, Venezuela may become self-sufficient in cotton production by 1975.

Corn

Corn is a basic food in the Venezuelan diet and a large portion of Venezuelan corn production comes from its smaller subsistence farms. Minimum prices established for corn are so low that commercial production is not as great as it could be. In the study, average yields were projected to be unchanged at 1,100 kilograms per hectare until 1970 and thereafter to rise to 1,200 kilograms per hectare. Nevertheless, corn production was not expected to increase faster than the historical rate unless it became the object of specific development programs on the part of the Government.

Apparent per capita consumption declined in the late fifties but increased in the early sixties to levels exceeding those projected. A decrease in direct human consumption as other products are substituted for corn has been generally offset by the increasing demand for corn in livestock and poultry feeds. Considering both human and animal needs, the total demand for corn was projected to be 541,000 tons in 1965 and 793,000 tons in 1975. Corn imports have been relatively small in the past with shortages of corn for feed being met by wheat imports. Barring changes in Government policy, the study projected an import demand for corn of 91,000 tons in 1965 and 263,000 tons in 1975.

Actual corn production has increased faster in recent years than was projected. Imports, while continuing to fluctuate, generally increased, with actual imports for 1964-65 not too far from the 1965 projection. The larger production of corn and the increasing imports provide an apparent consumption larger than was projected, indicating projected demand for corn may have been understated.

Beans

Black beans and other beans, traditionally produced on the smaller subsistence

farms, were considered perfect substitutes for the purpose of import demand projections. Black beans are preferred to other types of beans in the Venezuelan diet and their total production has been about twice that of other beans. Total bean production increased rapidly in the 1950's but decreased in the 1960's, varying between 35,000 and 79,000 tons, largely because of virus disease problems. These disease problems are expected to be surmounted so that by 1975 average yields are expected to reach 700 kilograms per hectare.

Total production of beans, projected at 70,000 tons in 1965 and 89,000 tons in 1975, has not increased as rapidly as expected, with only 42,000 tons of beans produced in 1965. Domestic demand was projected to exceed the supply by 20,000 tons in 1965 and 26,000 tons in 1975. Actual imports ranged between 8,000 and 28,000 tons in 1950-65 and have been at about projected levels, indicating that demand has not grown as fast as expected and that some shift to other foods may have occurred.

Beef

The major source of meat consumption, beef, generally has not been produced in sufficient quantities to supply Venezuela's domestic demand. Significant but undetermined quantities of beef on-the-hoof, reportedly imported from Colombia, are reflected in domestic slaughter figures.

Total demand for beef was expected to be 182,000 tons in 1965 and 251,000 tons in 1975. Total supply estimates indicated deficits of 22,000 tons in 1965 and 6,000 tons in 1970, but a 10,000 ton surplus available for export in 1975. Actual production (slaughter) is about at projected levels, although recorded imports have been insignificant and the total availability (about 20,000 metric tons) is less than the demand estimated for 1965. Imports will probably continue to be insignificant and the projected exports for 1975 may not materialize.

Pork

The Government is presently protecting the pork industry, a policy which, according to the study, would stimulate pork production. Total demand for pork was projected at 38,000 tons in 1965 and 58,000 tons in 1975. Considering past trends but weighing heavily the Government protection, pork production was projected to increase 66 percent between 1965 and 1975. Pork supply, projected to show a deficit of about 3,000 tons in 1965, was expected to fill the domestic demand and be neither imported nor exported in 1970 and 1975.

Actual production has not achieved the expected growth, falling short of projected production by 5,000 tons in 1965. Actual demand in 1964 and 1965 was higher than projected demand because imports increased instead of declining as projected. Larger imports can be expected until domestic production is adequate to fill domestic demand; in fact, if 1960-65 production trends continue through 1975, about 20,000 tons of pork will need to be imported to fill projected domestic demand.

Dairy Products

Projections of milk and milk products, expressed in fresh milk equivalent, were made for raw, pasteurized, and dried or canned milk as well as for cheese and butter. These projections were then aggregated into a total demand and supply for milk.

Milk production, which has increased progressively, was expected to continue to increase at its historical growth rate reaching almost 635,000 tons in 1965 and 914,000 tons in 1975. 6/

6/ Fresh milk equivalent.

Milk consumption in all forms has also increased rapidly, going from over 255,000 tons in 1950 to 779,000 tons in 1965, with per capita consumption fluctuating between 89 and 97 kilograms (fresh milk equivalent) between 1960 and 1965. Although imports of dried or canned milk and cheese represent substantial portions of total consumption of these products, a Government milk subsidy was expected to encourage the domestic industry. Dried or canned milk imports reached a peak in 1956 and have been decreasing since then. Butter imports have been decreasing steadily since the early fifties and now are relatively small. Imports of cheese generally increased during the 1950's but were decreasing slowly in the early 1960's.

The total projected demand for milk and milk products, in fresh milk equivalent, exceeded the projected supply by 387,000 tons in 1965 and by 565,000 tons in 1975. Practically all of this difference was to be supplied by imports of nonfat dried milk since imports of other products, except for small quantities of specialty cheeses, were not expected. Imports of milk and milk products converted to nonfat dried milk were projected at about 35,000 tons in 1965 and 51,000 tons in 1975.

Recent data indicated that actual production as well as imports have not grown as fast as projected. Domestic production of milk has not increased as rapidly as projected since milk prices have been maintained at low levels for both producers and consumers. Imports have been restricted by various import controls; therefore, the effective demand for milk and milk products has been lower than that projected.

Edible Vegetable Fats and Oils

Demand projections were made separately for edible vegetable oils, fats, and margarine. The supply of oil-bearing commodities produced domestically was then projected, converted to oil, and allocated among the projected demands. Deficits in the projected supply were indicated and imports of oil-bearing commodities or oils were given by commodity.

The demand for edible vegetable fats and oils is filled largely by domestically produced commodities because Government policies restrict imports in order to ensure complete utilization of the domestic supply. Generally, only oils or raw products are imported to fill a specific deficit or to meet a particular need not met by domestically produced oils. Sesame oil, coconut oil, and cottonseed oil are the major oils consumed; olive oil, peanut oil, and soybean oil are consumed in much smaller quantities.

Since all sesame oil produced in Venezuela was expected to be consumed, no imports or exports of sesame seed or oil were projected. The sesame seed supply and demand was projected to be 59,000 tons in 1965 and 95,000 tons in 1975. Although neither sesame oil production nor demand has expanded as fast as projected, some imports have been required to meet domestic demand. Production has more than doubled since 1960, and it is probable that in 1970 and 1975 Venezuela will be self-sufficient in sesame production.

The supply of cottonseed for oil production is largely a function of the supply of seed cotton. Demand for cottonseed oil, a byproduct of the cotton industry, does not appear to influence cotton production significantly. The supply of cottonseed, based on the projected supply of cotton, was projected to be 23,000 tons in 1965 and 31,000 tons in 1975; all of the cottonseed oil produced from this seed was expected to be consumed. An additional special demand not supplied domestically--cottonseed oil for hydrogenation and canning--was projected at 5,000 tons in 1965 and 8,000 tons in 1975. Recent imports of cottonseed oil have been exceeding these levels.

The final import demand for copra was expected to be 48,000 tons in 1965 and 70,000 tons in 1975. Imports of copra in 1964 reached projected 1965 levels while

domestic production of coconuts increased more than 200 percent between 1960 and 1965, but still did not reach projected levels. Therefore, total copra availability has been slightly lower than 1965 projections.

Some additional imports of olive oil, peanut oil, and soybean oil have been necessary to meet domestic demand. The study projected a constant import demand of 500 tons of olive oil for 1965 through 1975, and 5,300 tons and 9,900 tons of peanut and soybean oil for 1965 and 1975, respectively. Imports of olive oil and other oils in recent years appear to be in line with projections.

Recently, Venezuela has begun to import soybeans for crushing, which increases the amount of oil available. Even excluding the soybean crushings, the apparent demand for oils in 1964 exceeded 1965 projections by 8 percent. Future demand will likely continue to exceed projected demand, calling for larger imports of oils and oil-bearing seeds than the study projected.

Total demand for edible vegetable fats and oils (in fat equivalent) was projected at about 83,000 tons for 1965 and 129,000 tons for 1975. Domestic supplies for these years were 43,000 and 67,000 tons, leaving import deficits of 41,000 and 62,000 tons, respectively. Venezuela was expected to be self-sufficient through 1975 in animal fat needs (slaughter fats not covered by the study, and butter treated under milk and milk products), which were expected to range from 18,000 to 22,000 tons per year.

Since import projections for specific vegetable fats and oils are based on present policy and specialized needs, their composition could shift with changes in needs or policies. Also, declines in slaughter fat consumption could increase the demand for vegetable fats and oils.

Other Commodities

The study indicated Venezuelan production would supply the domestic demand in 1965, 1970, and 1975 for eggs and poultry, paddy rice, potatoes for consumption, cassava, sugars, and tobacco. The domestic supply of beef was also expected to meet needs in 1975 while pork was expected to fill domestic demand in 1970 and 1975.

Eggs and Poultry

Eggs and poultry, traditionally produced on small-scale subsistence farms, are important farm products in the Venezuelan diet. Because historical data for these products were relatively scarce and questionable, their future demand was projected on the basis of the National Survey. The projected demand for eggs was 32,000 tons in 1965 and 48,000 tons in 1975, while the projected demand for poultry increased from 41,000 tons in 1965 to 60,000 tons in 1975. Total supply projections for eggs and poultry were quantified to make them coincide with their demand projections. Actual production of eggs has not increased as fast as projected, but imports have been restricted, forcing the effective demand to be equal to domestic production. Poultry production appears to have increased faster than projected.

Rice

Rice production has fluctuated widely, reaching a high level in 1954, decreasing to a low point in 1958, then increasing steadily to an all-time high in 1965. Rice production was projected at a rate higher than the historical trend because the projected demand exceeded the projected supply. Justifications for the increase to fill projected demand were: Average yields were projected to increase to 1,800 kilograms per hectare in 1965 and 2,500 kilograms per hectare in 1975; some of the newly developed irrigated land was expected to be planted in rice; and the Government was to conti

its minimum price policy for rice. Rice exports were not anticipated because of the relatively high producer costs in Venezuela, but Government policies would ensure adequate production to fill domestic demand. Therefore, the domestic supply of rice (on a paddy basis) was projected to equal the domestic demand of 138,000 tons in 1965 and 191,000 tons in 1975.

Rice imports have generally fluctuated conversely with production because they tend to compensate for shortages of domestic production. Imports before 1959 were predominantly in the form of milled rice, but since then additional milling capacity has been constructed and rice imports have been largely in the form of paddy rice.

Data available since the study was completed indicate rice production reached 200,000 tons in 1965, 62,000 tons more than projected. Apparent consumption of milled rice in 1965 has exceeded projected demand by 40,000 tons and stocks of rice are expanding rapidly. Limited rice imports, now largely for seed, originate from the United States. Even these imports of rice seed are expected to decline as Venezuela develops its own seed supply.

Venezuela has been unable to compete on the world market because of the high cost of domestic production. Some rice is being substituted for corn which was in short supply in 1964, and rice flour is being substituted experimentally for wheat flour in the baking industry. In an effort to reduce rice stocks, the Government is considering possible barter deals; for example, rice was exchanged for farm machinery in 1965.

Minimum rice prices are guaranteed to producers, crop financing is available, and imports are limited, thus stimulating rice production. In spite of a reluctance to reduce minimum prices, the Government may be forced to do so if alternative methods of rice utilization fail. Price reductions would probably bring rice supply back in line with domestic demand, but at a level slightly higher than study projections have indicated.

Potatoes

Potato production generally increased during the study period, going from 29,000 tons in 1950 to 136,000 tons in 1965. The increased output can be attributed to increases in both average yields and cultivated area harvested. The Government provided a guaranteed minimum price to the producers, credit assistance, and technological help in techniques of cultivation, storage, and marketing. In addition to these incentives, immigration in the 1950's and increased urbanization throughout the period increased domestic demand. Imports supplied a large portion of domestic demand for potatoes until 1956. Between 1950 and 1956, domestic production doubled and imports declined from around 37,000 tons to under 8,000 tons. Although per capita consumption increased gradually over the years, reaching almost 15 kilograms in the early sixties, Government controls on potato imports probably helped restrict the growth of per capita consumption. Because of this factor, growth of domestic demand was projected at a rate slightly higher than the historical rate and demand was expected to be 134,000 tons in 1965 and 201,000 tons in 1975. Domestic supply projected on the historical rate was slightly higher than projected demand, but the study indicated potatoes would not be exported.

Data available since completion of the study indicate imports of potatoes for consumption have become insignificant. Total production has continued to fluctuate and increase. Actual production in 1965 was 136,000 tons, somewhat less than both the supply and demand projected for that year. However, the potential for increased production exists, and it is likely Venezuela will not import potatoes for consumption, except in special cases where the supply falls short just preceding the harvest of the domestic potato crop. It is more likely that small surpluses will be produced and limited exports can be expected.

Sugar

In Venezuela, both centrifugal (refined) and noncentrifugal (crude brown sugar) are produced from domestic sugarcane. Total production of sugars (centrifugal plus noncentrifugal) has been increasing, going from 168,000 tons in 1950 to 385,000 tons in 1965. Production of noncentrifugal sugar exceeded domestic production of centrifugal sugar until 1954. By the early sixties, centrifugal sugar production was four times that of noncentrifugal sugar. The cultivated area of sugarcane did not change greatly over the study period, and yields per hectare accounted for most of the increase in sugar production.

In the early years of the study period, imports of centrifugal sugar represented a significant portion of domestic sugar consumption but some sugar was exported in 1956, 1957, and 1958. However, these exports were at prices below the cost of production and the study indicated these exports would not be repeated. The study also indicated Venezuela would generally produce enough sugar to meet domestic demand because of added capacity in the refining industry, increased yields, and increases in area under cultivation.

Total demand for sugars, derived from both historical consumption and data from the Family Survey, was projected at 313,000 tons in 1965 and 444,000 tons in 1975, with noncentrifugal sugar representing around 10 percent of the demand by 1975.

Sugar production has continued to increase. Almost 340,000 tons of centrifugal sugar and 45,000 tons of noncentrifugal sugar were produced in 1965, an amount larger than projected. Average yields in cane and in extractions have continued to increase and stocks also have been growing. Venezuela has an import quota from the United States and has exported sugar under it. Some exports of sugar can be expected to continue.

Cassava

Cassava or yuca, an important staple food item in Venezuela, is consumed directly as well as in the form of a starch and "cazabe" (bread made from cassava). Limited quantities of cassava are also used for animal feed. Historically, cassava production has been widely dispersed and very rudimentary. The volume of production and land area in production are hard to quantify because statistics on this crop are fragmentary. The demand for cassava was projected largely on the basis of the Family Survey, with adjustments made for additional starch, cassava bread, and animal feed consumption. The projected total demand for cassava, 345,000 tons in 1965 and 464,000 tons in 1975, would permit an apparent per capita consumption of slightly over 39 kilograms by 1975. The study did not anticipate imports of cassava during the study period, and final supply was projected to equal domestic demand.

Actual production of cassava has exceeded the projected supply. Exports, however, are not expected to occur and the supply should be consumed domestically, possibly substituting in part for crops in short supply (such as corn or wheat), both directly and in livestock feed.

Tobacco

Historically, tobacco production has increased less rapidly than domestic demand. Starting in 1960, tobacco imports were severely limited by the Government in an effort to encourage greater domestic production. The study assumed production would increase enough to fill domestic demand and therefore the projections based on the historical growth rate were adjusted upwards, making projected supply equal to projected demand.

Since 1960, tobacco consumption in Venezuela has been largely in the form of cigarettes and cigars produced domestically because of the Government's protectionistic policy. However, a sizable volume of imported contraband cigarettes has been available in the country. Considering only the legal consumption of cigars and cigarettes, demand was projected to be 12,000 tons in 1965 and 17,000 tons in 1975.

Data available after the study was completed indicate that neither supply nor demand for tobacco has grown as fast as projected. Given the present price structure and import restrictions, domestic supply has tended to meet domestic demand. Imports have been largely limited to aromatic tobaccos. Tobacco output reached a peak of 10,000 tons in 1961 (the last year considered by the study), but only 8,400 and 9,000 tons of tobacco were produced in 1964 and 1965, respectively. Even so, the tobacco industry is one of the largest industries in Venezuela.

The present costs of production severely restrict the international market for Venezuelan tobacco, and only small amounts have been exported. Tobacco producers are trying to reduce costs and pressure is being exerted to increase exports. Venezuela possesses the capacity to expand production and to export tobacco, especially if present cost-price ratios become more favorable. Nevertheless, it appears that while study projections are too high they are probably correct in their assessment that both imports and exports will be relatively minor and that domestic supply will fill the domestic demand through 1965.

STUDY IMPLICATIONS FOR U.S. AGRICULTURAL TRADE

U.S. trade with Venezuela has grown dramatically in the last 25 years. Imports increased 25 times, from $38 million to $937 million annually from 1940-44 to 1960-64; exports increased over eightfold, from $63 million to $524 million for the same period (table 20). More recently, the rates of increase have declined, with imports climbing from $942 million in 1960 to $1 billion in 1965 and exports growing from $548 to $621 million in the same period.

U.S. agricultural trade with Venezuela has also gained over the years but declined in relative importance. Agricultural imports totaled $10 million or 26 percent of total imports in 1940-44, and $20 million or only 2 percent in 1960-64 (table 20). Agricultural imports decreased from $22 million in 1960 to $18 million in 1965 and then increased to $22 million in 1966, about 2 percent of total imports. U.S. agricultural exports to Venezuela grew from $9 million in 1940-44 to $80 million in 1960-64; they were 15 percent of total exports for both periods. However, such exports declined from $92 million in 1960 to $76 million in 1965, then increased to $82 million in 1966, ranging from 18 to 12 percent of total U.S. exports to Venezuela for the period.

Venezuela as an Agricultural Market

Venezuela supplied between 0.4 and 0.6 percent of all U.S. agricultural imports and took between 1.9 and 1.2 percent of U.S. agricultural exports during 1960 through 1965 (table 21).

In 1960, the United States exported over 16 percent ($19.7 million) of all its exports of dairy products to Venezuela, but only 3 percent ($5.9 million) in 1965. Wheat and flour exports fluctuated between $12 and $20 million in the same period, accounting for between 1.1 and 1.6 percent of the U.S. total. Other commodities also fluctuated. In dollar terms, U.S. exports to Venezuela of feed grains, oilseeds, vegetable fats and oils, and animal fats and oils generally increased, while exports of

wheat and flour, oilcake and meal, nuts and preparations, hides and skins, and cotton did not change significantly between 1960 and 1965. All other U.S. agricultural exports to Venezuela declined.

On a percentage share of the total value of U.S. agricultural exports, no exports to Venezuela increased significantly. The percentage share remained about the same during this period for wheat and flour, feed grains, poultry meat, hides and skins, animal fats and oils, vegetable fats and oils, and cotton. The importance of Venezuela as a U.S. market for the other commodities decreased.

Venezuela is using subsidies and import restrictions to achieve self-sufficiency in agriculture. The study indicated that the largest potential import demand will be for commodities which Venezuela cannot produce economically, largely because of ecological problems. Generally, the study expected future imports to consist of basic food commodities not produced domestically; for example, wheat and barley, and some imports of "luxury items" such as specialty cheeses. Other imports are only expected when needed to meet the temporary deficits usually preceding a harvest period.

The United States has been a traditional supplier of agricultural products in Venezuela, but, except for established contacts, the United States has no special advantage in the Venezuelan market. The market is sophisticated, with sellers generally competing on a price basis and buyers shopping around.

Technology and salesmanship are important in the competitive Venezuelan market. For example, the wheat market can be divided into two separate markets: high-protein wheat for baking, and feed wheat for livestock feed. Present baking practices demand high-protein wheat such as U.S. hard red spring or the Canadian Manitoba. The major factors influencing purchasing decisions (given equal quality) are the price of wheat and transportation costs. If U.S. efforts to show the Venezuelan baking industry how it can produce a high-quality product using lower priced, lower protein wheat are successful, the United States may be in a better competitive position by being able to supply the lower priced wheat. However, other wheat producers in Latin America may provide increasing competition to the United States.

The United States supplied practically all of the feed wheat which Venezuela uses in livestock feeds. Favorable exchange rates for wheat make feed wheat competitive with other feed grains which do not receive the favorable rates. The market for U.S. feed wheat should continue as long as the present exchange rates remain in practice.

Another example of how technology and salesmanship are increasing demand can be found in soybeans which were originally imported to be crushed for their meal use in livestock feed. The byproduct, soybean oil, is unfamiliar to the industry, but promotion and explanation of its use should increase the demand for soybeans.

For practically all commodities, local knowledge of the market and alertness to price competition will be necessary if the United States is to maintain its present share of the Venezuelan import market.

Regulation of Foreign Trade

The agricultural policies of Venezuela are designed to encourage greater local production of all major commodities, except wheat, and to reach the goal of national self-sufficiency at the earliest possible date. Officials also hope to develop a local food processing industry. To reach these goals, the Government has enacted numerous programs, including strong import protection, support prices, subsidies, and production credits. A beginning has been made on an agrarian reform plan that involves distribution of land, protection of property rights, and expanded programs for research,

education, and extension.

Tariffs, based on specific duties, are comparatively low and generally have not been a major instrument in regulation of agricultural imports. Thoroughbred animals are admitted free; approximate duties on important agricultural imports (bolivares per kilogram) are: fresh, chilled, or frozen meat, 0.001 ($0.0002); dried and evaporated milk, 0.50 ($0.11); wheat, 0.02 ($0.004); malt, 0.16 ($0.04); beans, 0.30 (0.07). Exceptions to the general rule of low tariffs are: edible oils, 4.00 ($0.88); butter, 2.20 ($0.48); fruit pulp, 2.00 ($0.44); feed corn and canned meats, 1.20 ($0.26); and cigarettes, 20.00 ($4.40).

Quantitative restrictions in the form of licenses are required for the importation of most agricultural commodities, although a few commodities such as live animals, some fresh fruits, and animal feedstuffs other than grain may be imported without a license. Restrictions have been applied by refusing to grant licenses for certain products, such as processed pork, butter, and cheese, and by establishing import quotas for other commodities.

Imports of dried milk, black beans, cheese, copra, hogs, and pork products are further restricted by tie-in sales requirements. Imports of these commodities may be exempt from normal duties when stipulated quantities of domestic commodities have been purchased in advance. Exchange controls are used to encourage imports of dried milk and wheat grain, both of which are allowed entry under license at an exchange rate of 3.35 bolivares per U.S. dollar. Most other products are subject to the free rate, currently 4.54 bolivares per U.S. dollar.

Agricultural trade generally is in private hands. However, the Government's Banco Agricola y Pecuario (BAP) has a monopoly on importation of corn, rice, and potatoes for seed and consumption. In times of scarce supply, the bank also imports other food commodities.

Venezuela has most-favored-nation agreements with the United States, Canada, Great Britain, France, the Netherlands, Belgium, Italy, Spain, Bolivia, and El Salvador. Under a reciprocal agreement, special tariff concessions have been granted on many U.S. agricultural products, such as prepared milk, wheat flour, bacon, hams, chickpeas, lentils, lima beans, dried peas, barley malt, and hops. However, many of these items are subject to prior licensing, and the effect of the concessions is not fully transferred to U.S. exporters. Agricultural commodities have been received from the United States under Public Law 480.

Subsidies are paid on coffee and cocoa exports whenever world prices fall below a level set by the Government. Low-grade cocoa exports receive most of the subsidy, as the better cocoa varieties and most of the coffee exports command good prices on the world market. The Ministry of Agriculture helps producers establish export organizations. There is growing interest in increasing production of tobacco, fruit, other tropical products, and certain seasonal crops, such as melons and tomatoes, and in developing export markets for these products.

Competition from Other Suppliers

An analysis of official Venezuelan trade data for the years 1960 through 1965 indicates that at best the United States is holding a relatively constant share (43 to 52 percent) of the Venezuelan import market for selected agricultural commodities (table 22). 7/ During this period the United States did, however, provide over half of

7/ The selected commodities accounted for about three-fourths of all Venezuelan agricultural imports in this period.

Venezuela's imports of wheat and wheat products, barley malt, dried, canned, and prepared fruits, animal feed, unmanufactured tobacco, fresh and dried beans, cottonseed oil, animal fats and oils, corn, live animals, fresh and dried peas, beef, eggs, and fresh fruits and nuts.

The U.S. share of the Venezuelan market appears to be decreasing for milk and milk products, wheat and wheat products, cotton, barley and barley malt, animal feed, oats and oats products, hops, seed potatoes, and unmanufactured tobacco. Only in the case of eggs and vegetable oils (excluding cottonseed oil) does the United States appear to be increasing its percentage share of the market. No trend is evident in the imports of all other commodities.

Canada is an important source for Venezuela's imports of wheat and flour, oats and oats products, barley, dairy products, and potatoes for seed and consumption purposes. Argentina is also a significant competitor in the import market for wheat and flour, fresh fruits and nuts, and canned and prepared fruits. Mexico competes with the United States in the corn and dried bean market, while Peru is an important supplier of cotton and animal feed. The Netherlands provides much of Venezuela's imports of vegetable oils (excluding cottonseed oil) and dairy products. Denmark is also an important competitor in the dairy product market, while Portugal provides some imports of dried peas.

Venezuela is now a member of the Latin American Free Trade Association (LAFTA). While protectionism and the high cost of Venezuela's agricultural production may tend to limit agricultural trade with LAFTA members, Venezuela's membership could bring discrimination against nonmember countries.

U.S. Trade Potential

The study covered most agricultural commodities traded with Venezuela. Export exceptions, accounting for less than one-fourth of the value of U.S. shipments to Venezuela in 1965, were animal fats and oils, soybeans, hides and skins, fruits and preparations, nuts and preparations, and some vegetables and preparations. Import commodities covered represented about three-fourths of the 1965 total. Trade potential for principal study commodities and soybeans is summarized below (tables 21, 22, and 23). 8/

Imports

Coffee.--Exports were projected at 21,000 tons in 1965 (vs. 18,000 actual) and at 9,000 tons in 1975. U.S. imports generally fluctuated, averaging 17,700 tons valued at $15 million in 1960-65, 76 percent of the value of U.S. agricultural imports from Venezuela and 81 percent of the value of Venezuelan coffee exports in this period. Projections indicated that U.S. imports will decline in total and relative value.

Cocoa.--Cocoa bean exports were projected at 12,000 tons in 1965 (corresponding to actual exports) and 11,000 tons in 1975. U.S. imports of 5,600 tons, valued at $3 million, for 1960-65 represented 15 percent of the value of U.S. agricultural imports from Venezuela and 51 percent of Venezuela's bean exports. U.S. imports may continue at about this level.

8/ Covered earlier in this summary but excluded here are poultry meat, eggs, rice, potatoes, cassava, sugar, and tobacco, where study projections indicated that production would meet needs with little or no trade occurring. However, limited sugar exports and some imports of luxury items and improved breeding stock will probably continue.

Bananas and plantains.--Projected exports of bananas and plantains were 116,000 tons in 1965 and 151,000 tons in 1975. Actual exports have been growing but were only 12,000 tons in 1965 in spite of rapidly increasing output. U.S. imports of 3,600 tons valued at $400,000 amounted to 2 percent of total U.S. agricultural imports from Venezuela and 47 percent of Venezuelan exports of these commodities in 1960-65. Banana and plantain exports will likely continue to lag and to be insignificant in U.S. trade.

Exports

Wheat and flour.--Import demand, almost all wheat, was projected to increase rapidly, from 430,000 tons in 1965 (vs. 629,000 tons actual) to 744,000 tons in 1975 (wheat equivalent). U.S. shipments were $12 million to $20 million in 1960-65, averaging 251,800 tons valued at $16 million or 21 percent of the value of U.S. agricultural exports to Venezuela and 56 percent of wheat and flour imports in this period. Canada and Argentina, with market shares of 16 to 48 percent and 2 to 6 percent, respectively, were the major competitors.

Corn.--Imports were projected at 91,000 tons in 1965 (vs. 171,000 tons actual in in 1964 and 45,000 tons in 1965) and 263,000 tons in 1975. U.S. corn exports averaged 34,900 tons valued at $2 million in 1960-65, amounting to less than 3 percent of U.S. agricultural exports to Venezuela and supplying two-thirds of the value of corn imports. Imports from Mexico, the major competitor, were important only in 1964. With the projected threefold increase in this market and Venezuela's entry into LAFTA, increased Latin American competition is likely.

Barley and malt.--Barley and malt imports, mostly malt, were projected at 60,000 tons in 1965 (vs. 44,000 tons actual) and 107,000 tons in 1975 (grain equivalent). Average U.S. exports were 28,900 tons valued at $3 million in 1960-65, representing 4 percent of U.S. agricultural exports to Venezuela or 53 percent of imports. Major competition from the Netherlands and Canada for barley and from Czechoslovakia for malt will likely continue.

Oats and products.--Projected imports were 23,000 tons in 1965 (vs. 19,000 tons actual) and 31,000 tons in 1975 (grain equivalent). U.S. exports were 4,700 tons valued at $800,000 in 1960-65, or 1 percent of U.S. agricultural exports to Venezuela. The United States has been supplying 13 to 54 percent of this market; Canada, 14 to 53 percent; and the Netherlands, 10 to 38 percent. Imports, predominantly oatmeal in the past, may shift to grain with increased emphasis on local processing.

Pulses.--Imports, largely beans, were projected at 20,000 tons in 1965 (vs. 18,000 tons actual) and 26,000 tons in 1975. U.S. dry bean exports were 10,400 tons or $2 million in 1960-65, representing 3 percent of U.S. agricultural exports to Venezuela. The U.S. share of this market has ranged from 64 to 87 percent, with Mexico supplying most of the remainder. As with corn, shifts to other LAFTA countries may occur.

Edible vegetable fats and oils.--Projected imports were 41,000 tons in 1965 (vs. 45,000 tons actual), increasing to 62,000 tons in 1975 (oil equivalent). Oils and oilseeds, including 1,900 tons of soybeans and small amounts of peanuts, accounted for about 7 percent of U.S. agricultural exports to Venezuela in 1960-65, or 13,000 tons (oil equivalent) valued at $5 million. The United States supplied practically all of Venezuela's imports of cottonseed oil, 12 to 32 percent of other vegetable oils, and most soybeans, peanuts, and animal fats and oils. The Netherlands supplied 23 to 44 percent of edible vegetable oils, other than cottonseed. Sesame seed and copra were imported from other countries. Projected imports will be largely in the form of raw materials and will be processed in Venezuela, with minimum oil imports for special needs.

Dairy products.--Imports were projected at 287,000 tons in 1965 and 565,000 tons in 1975 (fresh milk equivalent). Trade restrictions, however, have reduced effective demand, and imports decreased from 292,000 tons in 1963 to 237,000 tons in 1965. U.S. exports of dairy products to Venezuela of 28,800 tons (product weight, mostly dried milk) were valued at $10 million in 1960-65 and accounted for 13 percent of U.S. agricultural exports to this market. Such exports have decreased in recent years, with the U.S. share fluctuating between 12 and 18 percent of this declining market. The Netherlands (19 to 24 percent), Denmark (17 to 22 percent), and Canada (23 to 33 percent) provide most imports. Future imports will probably be largely dried and canned milk and specialty cheeses.

Beef and veal.--Projections indicated imports of 22,000 tons in 1965, but exports of 10,000 tons by 1975. U.S. exports have been negligible, less than $50,000 and 100 tons in 1960-65. Actual Venezuelan imports have been insignificant and projected exports are questionable.

Pork.--Imports of 3,000 tons were projected in 1965, with self-sufficiency in later years. Actual imports fluctuated between 6,000 and 8,000 tons through 1964, but were 5,300 tons in 1965. The U.S. share was 27 and 51 percent, with exports of 2,300 tons valued at less than $3 million in 1960-65. Denmark, the major source, supplied between 28 and 60 percent.

Seed potatoes.--Projected imports ranged from 22,000 tons in 1965 to 33,000 tons in 1975. However, 1965 imports were only 13,000 tons. Canada is the major source, with U.S. supplies of little significance.

Cotton.--Imports were projected at 2,000 tons in 1965 (vs. 7,000 tons actual) and 4,000 tons in 1975, all long staple. U.S. exports of 1,700 tons, valued at $1.1 million in 1960-65, accounted for 87 to 25 percent by value of the market while Peru supplied 3 to 68 percent.

Table 1.--Population of Venezuela, by urban and rural sectors, 1936, 1941, 1950, and 1961, and projections for 1965, 1970, and 1975 1/

Year	Population				
	Rural 2/		Urban 3/		
	Number	Percent of total	Number	Percent of total	Total
	1,000	Percent	1,000	Percent	1,000
Actual:					
1936	2,703	77.9	765	22.1	3,468
1941	3,012	76.2	939	23.8	3,951
1950	2,978	58.5	2,113	41.5	5,092
1961	3,216	42.6	4,340	57.4	7,556
Projected:					
1965	3,294	37.4	5,504	62.6	8,798
1970	3,384	33.2	6,817	66.8	10,201
1975	3,473	29.4	8,339	70.6	11,812

	Annual compound rate of change		
	Rural	Urban	Total
	Percent		
Actual:			
1936-41	2.2	4.2	2.6
1941-50	0.1	9.4	2.8
1950-61	0.7	6.8	3.6
Projected:			
1961-65	0.6	6.1	3.9
1965-70	0.5	4.4	3.0
1970-75	0.5	4.1	3.0
1965-75	0.5	4.2	3.0

1/ Projections based on hypothesis two: between 1960 and 1975, life expectancy is assumed to increase 5 years and the birth rate is assumed to decrease at the rate of 0.5 percent yearly after 1965. 2/ Population less than 5,000. 3/ Population of 5,000 or more.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, Consejo de Bienestar Rural, Caracas, 1965, tables 14 and 15, p. 17.

Table 2.--Projected labor force and active labor force of Venezuela for 1965, 1970, and 1975

Category	1965			1970			1975		
	Labor force 1/	Active labor force 2/	Percentage of labor force active	Labor force 1/	Active labor force 2/	Percentage of labor force active	Labor force 1/	Active labor force 2/	Percentage of labor force active
	-Thousand-		Percent	-Thousand-		Percent	-Thousand-		Percent
Males	2,339	2,107	90.1	2,747	2,596	94.5	3,251	3,062	94.2
Females	2,197	493	22.4	2,626	631	24.0	3,151	941	29.9
Total	4,536	2,600	57.3	5,373	3,227	60.1	6,402	4,003	62.5

1/ Labor force includes all persons between 15 and 64 years of age and is based on projected population of hypothesis two. 2/ Active labor force includes all persons employed or looking for work; 1961 census percentages are used for 1965 projections while some modifications are made in the percentages by age and sex group for 1970 and 1975 projections.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 17, p. 18.

Table 3.--Projections of gross domestic product in Venezuela, by economic sector, for 1965, 1970, and 1975 under four hypotheses 1/

Economic sectors	1965				1970				1975			
	Hypotheses				Hypotheses				Hypotheses			
	3	2	1	4	3	2	1	4	3	2	1	4
	Million 1957 bolivares											
Agriculture	2,416	2,534	2,416	2,534	3,225	3,554	3,225	3,554	4,306	4,985	4,306	4,985
Mining and hydrocarbons	10,278	11,283	11,283	13,143	13,599	16,182	16,182	18,160	18,227	23,209	23,209	28,352
Industry	5,354	5,835	5,354	5,835	8,630	10,283	8,630	10,283	13,910	18,112	13,910	18,112
Construction	2,122	2,122	1,909	2,122	3,118	3,118	2,521	3,118	4,581	4,581	3,328	4,581
Electricity	854	854	854	854	1,969	1,969	1,969	1,969	4,540	4,540	4,540	4,540
Transportation & communication	1,474	1,271	1,271	1,271	2,086	1,552	1,552	1,552	2,923	1,893	1,893	1,893
Commerce	4,946	4,946	5,737	4,946	6,373	6,373	8,555	6,373	8,211	8,211	12,757	8,211
Services	8,756	8,756	9,719	8,756	11,319	11,319	13,920	11,319	14,663	14,663	19,936	14,663
Total	36,200	37,601	38,543	39,664	50,319	54,350	56,554	57,312	71,361	80,194	83,879	86,367
	Million dollars 2/											
Agriculture	721	756	721	756	963	1,061	963	1,061	1,285	1,488	1,285	1,488
Mining and hydrocarbons	3,068	3,369	3,369	3,923	4,059	4,830	4,830	5,421	5,441	6,928	6,928	8,463
Industry	1,598	1,742	1,598	1,742	2,576	3,069	2,576	3,069	4,152	5,406	4,152	5,406
Construction	633	633	570	633	931	931	753	931	1,367	1,367	993	1,367
Electricity	255	255	255	255	588	588	588	588	1,355	1,355	1,355	1,355
Transportation & communication	440	379	379	379	623	463	463	463	873	565	565	565
Commerce	1,476	1,476	1,712	1,712	1,902	1,902	2,554	1,902	2,451	2,451	3,808	2,451
Services	2,614	2,614	2,901	2,614	3,379	3,379	4,155	3,379	4,377	4,377	5,951	4,377
Total	10,806	11,224	11,505	11,840	15,020	16,223	16,881	17,108	21,301	23,938	25,038	25,781

1/ Hypotheses are ranked in order of magnitude, with largest total income being last. Underlined figures are those used for study demand projections. 2/ Converted into dollars at the rate of 3.35 bolivares per U.S. dollar.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela. Hypothesis one, table 23, p. 25; hypothesis two, table 25, p. 26; hypothesis three, table 27, p. 28; hypothesis four, table 29, p. 29.

Table 4.--Fixed gross investment in Venezuela, by economic sector, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Agriculture	Mining & hydrocarbons	Industry	Construction	Electricity	Commerce	Transportation and communications	Services	Total
				Million 1957 bolivares					
Actual:									
1950. .	365	703	226	56	55	433	468	958	3,264
1951. .	322	784	253	39	48	442	506	1,078	3,471
1952. .	383	1,149	280	21	63	501	489	1,473	4,358
1953. .	417	1,026	287	27	38	555	556	1,879	4,784
1954. .	603	1,051	341	71	109	366	1,046	1,879	5,466
1955. .	570	1,161	318	59	75	302	944	1,732	5,161
1956. .	605	1,601	358	82	104	286	1,047	1,499	5,597
1957. .	608	1,798	493	292	180	447	398	1,754	5,950
1958. .	540	1,628	549	85	539	449	403	1,905	6,098
1959. .	719	1,468	853	48	230	431	613	2,429	6,789
1960. .	669	1,016	626	18	223	239	736	1,198	4,725
1961. .	674	563	623	17	264	197	682	999	4,019
1962. .	767	479	609	34	192	155	709	1,179	4,124
1963. .	745	534	503	63	115	148	819	1,251	4,178
1964. .	817	605	646	78	163	232	917	1,757	5,215
1965. .	872	621	775	100	220	254	952	2,091	5,885
Projected:									
1965. .	1,046	1,295	1,108	110	531	371	984	1,865	7,310
1970. .	1,396	1,713	1,786	162	1,224	452	1,201	2,410	10,344
1975. .	1,864	2,297	2,879	238	2,824	583	1,465	3,123	15,273
				Million dollars 2/					
Actual:									
1950. .	109	210	67	17	16	129	140	286	974
1951. .	96	234	76	12	14	132	151	322	1,036
1952. .	114	343	84	6	19	150	146	440	1,301
1953. .	124	306	86	8	11	166	166	561	1,428
1954. .	180	314	102	21	33	109	312	561	1,632
1955. .	170	347	95	18	22	90	282	517	1,541
1956. .	181	478	107	24	31	85	313	447	1,671
1957. .	181	537	147	87	54	133	119	524	1,776
1958. .	161	486	164	25	161	134	120	569	1,820
1959. .	215	438	255	14	69	129	183	725	2,027
1960. .	200	303	187	5	67	71	220	358	1,410
1961. .	201	168	186	5	79	59	204	298	1,200
1962. .	229	143	182	10	57	46	212	352	1,231
1963. .	222	159	150	19	34	44	244	373	1,247
1964. .	244	181	193	23	49	69	274	524	1,557
1965. .	260	185	231	30	66	76	284	624	1,757
Projected:									
1965. .	312	387	331	33	159	111	294	557	2,182
1970. .	417	511	533	48	365	135	358	719	3,088
1975. .	556	686	859	71	843	174	437	932	4,559

1/ Projections for 1965, 1970, and 1975 are based on the GDP projections of hypothesis 3.
2/ Converted into dollars at the rate of 3.35 bolivares per U.S. dollar.

Sources: Historical data 1950-1965 taken from respective Memoria's or Informe Economico's of the Banco Central de Venezuela, Caracas. Projected data taken from Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 21, p. 24.

Table 5.--Projected per capita gross domestic product in Venezuela, by income, for 1965, 1970, and 1975

Income	Percentage relationship 1/	Projected per capita income					
		1957 bolivares			1957 dollars 2/		
		1965	1970	1975	1965	1970	1975
	Percent						
Gross domestic product:							
(at market prices). . .	100	4,144	4,933	6,041	1,237	1,473	1,803
(at factor cost) 3/ . .	93	3,826	4,587	5,618	1,142	1,369	1,677
National income	75	3,086	3,699	4,531	921	1,104	1,353
Personal income	60	2,469	2,960	3,624	737	884	1,082
Disposable income	59	2,428	2,910	3,564	725	869	1,064
Rural disposable income 4/	59	433	562	731	129	169	218
Urban disposable income 5/	59	3,622	4,076	4,744	1,081	1,217	1,416

1/ Rates based on 1950-61 relationships to GDP at market costs. 2/ Converted at 3.35 bolivares per dollar. 3/ The United Nations' Yearbook of National Accounts Statistics, 1964, defines gross domestic product at factor cost to be "the value at factor cost of the product, before deduction of provisions for the consumption of fixed capital, attributable to factor services rendered to resident producers of the given country. It differs from the gross domestic product at market prices by the exclusion of the excess of indirect taxes over subsidies." 4/ Based on 59 percent of GDP provided by the agricultural sector. 5/ Based on 59 percent of GDP provided by all other sectors.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, tables 44 and 45, pp. 36 and 37.

Table 6.--Gross domestic product in Venezuela, by economic sector, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Agriculture	Mining & hydrocarbons 2/	Industry 3/	Construction	Electricity	Commerce	Transportation and communications	Services	Total
	Million 1957 bolivares								
Actual:									
1950. .	1,014	3,817	1,274	827	69	1,726	699	3,301	12,728
1951. .	1,156	4,367	1,357	1,032	83	1,983	706	3,528	14,212
1952. .	1,239	4,669	1,579	1,144	97	2,085	675	3,760	15,248
1953. .	1,280	4,579	1,772	1,220	119	2,291	842	4,086	16,190
1954. .	1,284	4,994	2,022	1,376	135	2,678	876	4,384	17,749
1955. .	1,352	5,735	2,267	1,363	159	2,862	951	4,636	19,325
1956. .	1,446	6,579	2,484	1,605	187	3,156	945	4,963	21,366
1957. .	1,507	7,518	2,766	1,581	238	3,933	940	5,365	23,848
1958. .	1,576	7,088	2,972	1,618	281	3,803	1,002	5,825	24,164
1959. .	1,642	7,574	3,417	1,707	336	4,003	1,090	6,296	26,065
1960. .	1,807	7,854	3,310	1,444	367	3,839	1,041	6,773	26,433
1961. .	1,844	7,897	3,454	1,097	417	3,927	1,032	7,212	26,881
1962. .	1,979	8,595	3,740	1,156	487	4,045	1,060	7,523	28,585
1963. .	2,084	8,675	4,002	1,280	573	4,160	1,113	7,877	29,765
1964. .	2,264	9,170	4,527	1,473	644	4,535	1,243	8,280	32,135
1965. .	2,395	9,387	4,921	1,527	702	4,730	1,358	8,746	33,766
Projected:									
1965. .	2,416	10,278	5,354	2,122	854	4,946	1,474	8,756	36,200
1970. .	3,225	13,599	8,630	3,118	1,969	6,373	2,086	11,319	50,319
1975. .	4,306	18,227	13,910	4,581	4,540	8,211	2,923	14,663	71,361
	Million dollars 4/								
Actual:									
1950. .	303	1,139	380	247	21	515	209	985	3,799
1951. .	345	1,304	405	308	25	592	211	1,053	4,242
1952. .	370	1,394	471	341	29	622	201	1,122	4,552
1953. .	382	1,367	529	364	36	684	251	1,220	4,833
1954. .	383	1,491	604	411	40	799	261	1,309	5,298
1955. .	404	1,712	677	407	47	854	284	1,384	5,769
1956. .	432	1,964	741	479	56	942	282	1,481	6,378
1957. .	450	2,244	826	472	71	1,174	281	1,601	7,119
1958. .	470	2,116	887	483	84	1,135	299	1,739	7,213
1959. .	490	2,261	1,020	510	100	1,195	325	1,879	7,780
1960. .	539	2,344	988	431	110	1,146	311	2,022	7,890
1961. .	550	2,357	1,031	327	124	1,172	308	2,153	8,024
1962. .	591	2,566	1,116	345	145	1,207	316	2,246	8,533
1963. .	622	2,589	1,195	382	171	1,242	332	2,351	8,885
1964. .	676	2,737	1,351	440	192	1,354	371	2,472	9,592
1965. .	715	2,802	1,469	456	210	1,411	405	2,611	10,079
Projected:									
1965. .	721	3,068	1,598	633	255	1,476	440	2,614	10,806
1970. .	963	4,059	2,576	931	588	1,902	623	3,379	15,020
1975. .	1,285	5,441	4,152	1,367	1,355	2,451	873	4,377	21,301

1/ Projections based on hypothesis three. 2/ Excludes refining. 3/ Includes refining. 4/ Converted at 3.35 bolivares per dollar.

Sources: Historical data for 1950-65 taken from respective Memoria's or Informe Economico's of the Banco Central de Venezuela, Caracas. Projected data taken from Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 27, p. 28.

Table 7.--Annual compound growth rates of gross domestic product in Venezuela, by economic sector, 1950-65, and projections for 1965-70, 1970-75

Year	Agriculture	Mining & hydrocarbons	Industry	Construction	Electricity	Commerce	Transportation and communications	Services	Total
	Percent								
Actual:									
1950. . .	-	-	-	-	-	-	-	-	-
1951. . .	14.0	14.4	6.5	24.8	20.3	14.9	1.0	6.9	11.7
1952. . .	7.2	6.9	16.3	10.9	16.9	5.1	- 4.4	6.6	7.3
1953. . .	3.3	- 1.9	12.2	6.6	22.7	9.9	24.7	8.7	6.2
1954. . .	0.3	9.1	14.1	12.8	13.4	16.9	4.0	7.3	9.6
1955. . .	5.3	14.8	12.1	- 0.9	17.8	6.9	8.6	5.7	8.9
1956. . .	7.0	14.7	9.6	17.8	17.6	10.3	- 0.6	7.1	10.6
1957. . .	4.2	14.3	11.4	- 1.5	27.3	24.6	- 0.5	8.1	11.6
1958. . .	4.6	- 5.7	7.4	2.3	18.1	- 3.3	6.6	8.6	1.3
1959. . .	4.2	6.9	15.0	5.5	19.6	5.3	8.8	8.1	7.9
1960. . .	10.0	3.7	- 3.1	-15.4	9.2	- 4.1	- 4.5	7.6	1.4
1961. . .	2.0	0.5	4.4	-24.0	13.6	2.3	- 0.9	6.5	1.7
1962. . .	7.3	8.8	8.3	5.4	16.8	3.0	2.7	4.3	6.3
1963. . .	5.3	0.9	7.0	10.7	17.7	2.8	5.0	4.7	4.1
1964. . .	8.6	5.7	13.1	15.1	12.4	9.0	11.7	5.1	8.0
1965. . .	5.8	2.4	8.7	3.7	9.0	4.3	9.3	5.6	5.1
Projected:									
1965-70	5.9	5.8	10.1	8.0	18.2	5.2	7.2	5.3	6.8
1970-75	5.9	5.9	10.1	8.0	18.2	5.2	7.2	5.3	7.2

Source: Computed from table 6.

Table 8.--International reserves of Venezuela, 1955-64 1/

Year	Million dollars	Year	Million dollars
1955. . .	539	1960. . .	605
1956. . .	960	1961. . .	585
1957. . .	1,462	1962. . .	583
1958. . .	1,076	1963. . .	740
1959. . .	709	1964. . .	836

1/ At end of year.

Sources: Data for 1955-1962 taken from Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 110, p. 142. Data for 1963 and 1964 taken from respective Informe Economico's of the Banco Central de Venezuela, Caracas.

Table 9.--Results of Family Survey of Venezuela: Annual per capita consumption in 1962, quantity-price and quantity-income elasticities for selected commodities

Commodity	Annual per capita consumption in 1962, by zone, C_o		E_p Quantity-price elasticity		E_I Quantity-income elasticity	
	Rural	Urban	Rural	Urban	Rural	Urban
	- - -Kilograms- - -					
Grains and grain products:						
Rice	9.1	10.0	-0.30	-0.22	0.19	0.12
Oats and oat products	1.2	2.6	- .26	- .48	.19	.16
Wheat flour	3.1	4.0	- .15	- .28	.20	.21
Wheat bread	5.3	26.3	- .05	- .16	.17	.26
Corn and corn products	46.9	20.2	- .61	- .62	.13	.03
Sugars:						
Centrifugal	11.6	25.1	- .38	- .34	.21	.19
Noncentrifugal	8.7	8.0	- .36	- .96	- .07	- .10
Starches:						
Potatoes	9.2	18.4	- .30	- .56	.18	.24
Cassava	27.4	11.2	- .37	- .77	.06	.03
Pulses:						
Black beans	7.3	6.7	- .07	- .14	.11	.06
Other beans	4.1	2.2	- .75	- .48	.26	.16
Bananas and plantains:						
Bananas	43.1	40.2	- .42	- .49	.12	.16
Plantains 1/	22.5	42.4	- .26	- .58	.39	.10
Meat and eggs:						
Beef and veal	14.4	19.3	- .47	- .28	.19	.22
Pork	1.5	3.7	- .09	- .23	.18	.18
Poultry	1.2	5.7	- .57	- .40	.20	.22
Eggs 2/	1.7	4.7	- .84	- .25	.22	.19
Fish, fresh	6.7	10.4	- .23	- .72	.29	.16
Fats and oils:						
Vegetable fats and oils	0.7	5.3	- .30	- .47	.18	.27
Margarine	4.9	3.5	- .06	- .24	.26	.23
Lard	2.7	0.7	- .39	- .18	.25	.09
Milk and milk products:						
Raw milk 3/	13.7	4.2	- .46	- .43	.14	.16
Pasteurized milk 3/	2.3	34.1	- .80	- .42	.40	.34
Powdered milk	15.2	52.5	- .52	- .43	.23	.22
Domestic white cheese	2.3	2.6	- .12	- .41	.34	.25
Butter	0.1	0.9	- .48	- .73	.12	.34
Other:						
Ground coffee	2.4	3.0	- .36	- .26	.13	.24
Cocoa 4/	0.1	0.2	6/	- .76	6/	.20
Cigarettes 5/	0.6	1.2	- .10	- .16	.27	.23

1/ Conversion factor of 0.33 kilogram per unit. 2/ Conversion factor of 55 grams per egg used. 3/ Conversion factor of 1.0276 kilograms per liter used. 4/ Elasticities refer to cocoa beans and their derivatives. 5/ Domestic cigarettes only. Conversion rate of 0.001 kilogram of tobacco used per cigarette. 6/ Not available.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela. Per capita consumption--table 51, p. 49; elasticities, table 49, p. 45.

Table 10.--Expenditures for selected food commodities in Venezuela, as percentage of total expenditures for the selected food commodities, by area, 1962

Commodity category	Rural sectors	Urban sectors	Total
	Percent		
Grains and grain products	21.4	16.5	17.2
Rice	7.0	5.1	5.4
Oats and oat products	0.6	0.7	0.7
Wheat flour	0.6	0.5	0.5
Wheat bread	1.9	5.7	5.1
Pastas	4.4	2.9	3.1
Corn	6.8	1.6	2.3
Sugars	7.5	4.6	5.0
Centrifugal	3.5	4.0	3.9
Noncentrifugal	4.0	0.6	1.1
Starches	4.2	3.8	3.8
Potatoes	2.2	3.0	2.8
Cassava	2.0	0.8	1.0
Pulses	7.1	4.0	4.4
Black beans	5.8	3.5	3.8
Other beans	1.3	0.5	0.6
Bananas and plantains	4.2	4.3	4.3
Bananas	0.7	1.1	1.1
Cooking plantains	3.5	3.2	3.2
Meat and eggs	24.1	30.8	29.8
Beef	16.3	17.0	16.9
Pork	1.9	3.5	3.2
Cooking hens	1.1	1.3	1.3
Frying chickens	0.8	3.9	3.4
Eggs	1.7	3.2	2.9
Fish, fresh	1.9	1.6	1.6
Meats, canned	0.4	0.3	0.3
Fats and oils	8.0	6.7	7.0
Vegetable oils	1.1	4.6	4.3
Margarine	4.2	1.7	2.0
Lard	2.6	0.4	0.7
Milk and milk products	13.0	18.8	18.0
Raw milk	1.9	0.5	0.7
Pasteurized milk	0.6	5.5	4.8
Powdered milk	2.5	4.7	4.4
Domestic white cheese	6.9	4.6	4.9
Imported cheese	0.3	0.6	0.6
Butter	0.8	2.9	2.6
Other	10.6	10.5	10.5
Ground coffee	7.7	6.4	6.6
Cocoa beans and derivatives	0.1	0.2	0.2
Domestic cigarettes	2.8	3.8	3.7
Total 1/	100.0	100.0	100.0

1/ Totals do not add because of rounding.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela. Computed from data given in the Appendix, Part Two, Section II, pp. 184-219, which provided the results of the National Survey of Family Incomes and Expenses in Venezuela, taken in August and September 1962. The questionnaire covered family expenditures for a one-week period.

Table 11.--Apparent disappearance, selected years 1950-65, and projected domestic demand, 1965, 1970, and 1975, in Venezuela, selected agricultural commodities 1/

Commodity	Actual											Projected			Projected compound rate of growth 1965-75
	1950	1952	1954	1956	1958	1960	1961	1962	1963	1964	1965	1965	1970	1975	
	1,000 metric tons											1,000 metric tons			Percent
Wheat and flour 2/	167.9	183.8	210.6	225.5	299.8	317.0	362.7	321.2	362.6	540.6	630.6	433.0	572.3	744.1	5.6
Corn 2/	324.1	348.1	326.7	350.8	358.2	439.6	461.9	560.2	430.4	646.0	566.0	541.2	665.9	793.5	3.9
Rice, milled 3/	36.9	31.6	33.2	23.5	64.1	73.6	64.0	70.8	86.4	107.8	130.0	89.6	105.4	123.9	3.3
Barley and malt 4/	17.3	21.0	23.1	24.5	36.6	49.6	43.2	38.0	42.4	44.5	44.4	59.5	80.8	107.2	6.0
Oats & oat products 2/ 5/	10.3	11.6	13.8	15.0	17.8	16.3	17.2	17.2	16.2	18.3	19.4	23.0	27.2	31.5	3.2
Sugars 6/	174.2	181.7	193.3	202.0	218.6	238.5	260.1	287.5	274.3	327.4	383.2	313.8	373.5	444.5	3.5
Potatoes 5/ 7/	64.1	63.7	69.4	86.7	98.5	140.8	81.9	121.2	111.1	123.5	135.9	133.6	163.7	200.6	4.1
Cassava	137.6	209.1	193.5	182.9	189.1	340.3	139.1	322.8	342.4	311.7	301.4	344.6	399.7	463.6	3.0
Pulses 8/	62.7	69.8	66.6	84.7	97.4	91.9	62.1	47.6	53.9	59.7	60.2	90.0	101.9	115.4	2.5
Bananas and plantains 9/	413.0	501.5	499.5	542.2	582.9	756.1	631.6	775.4	1,021.5	1,013.3	1,099.6	771.3	907.1	1,062.1	3.2
Beef and veal	73.1	71.4	77.7	85.0	110.3	123.8	136.5	138.4	147.0	157.5	162.4	182.1	213.9	250.7	3.3
Pork	23.4	19.9	23.5	24.9	31.0	32.5	32.0	35.6	36.4	37.8	35.9	37.8	46.9	58.1	4.4
Poultry 10/	1.9	5.0	8.8	9.8	14.5	21.6	30.6	32.6	36.2	45.6	45.0	40.9	49.1	60.3	4.0
Dairy products 11/	255.1	407.0	507.1	825.7	669.9	692.2	721.0	762.9	793.3	787.9	779.0	1,021.8	1,237.7	1,479.1	3.7
Butter	5.4	4.4	4.5	4.9	4.6	4.9	3.7	3.8	3.6	3.5	4.6	5.5	6.9	8.5	4.4
Eggs 12/	13.4	15.1	17.3	21.8	30.5	30.4	24.0	22.3	16.5	24.0	27.9	32.0	39.2	48.1	4.2
Vegetable fats & oils 13/	21.5	26.3	34.5	38.8	50.2	62.3	69.1	77.7	83.8	91.4	89.7	83.5	103.8	128.9	4.5
Cocoa 14/	2.5	2.5	4.5	5.5	5.9	6.7	7.2	8.1	8.2	8.8	9.8	3.0	3.6	4.4	3.9
Coffee	20.0	19.4	21.0	22.9	25.0	28.5	29.3	29.7	28.9	26.9	36.1	33.7	40.1	48.0	3.6
Seed cotton 5/	14.8	16.4	18.2	16.5	23.5	30.6	41.1	27.6	40.2	49.7	51.9	43.0	52.3	63.5	4.0
Tobacco 15/	4.1	5.3	6.6	8.9	7.6	10.4	11.2	9.0	9.1	8.5	9.1	12.0	14.4	17.2	3.7

1/ Apparent disappearance is defined here as total production plus net imports. Disappearance and projected demand include food and nonfood use and direct and indirect consumption. In a few cases, data for 1961 through 1965 may not be strictly comparable to earlier years. 2/ Includes products expressed in grain equivalent. 3/ Milled rice not including inventories 1960-65, assuming no inventories 1965-75; conversion rates paddy to milled rice 1944-49 = 0.6303; 1950-58 = 0.6400; 1959-75 = 0.6500. 4/ Consumed largely in the form of beer; includes malt converted to barley by conversion factor 1.04 kilograms malt = 1 kg. barley. 5/ Three-year moving average, 1950-58. 6/ Noncentrifugal sugar plus centrifugal sugar, three-year moving average, 1950-58. 7/ Excludes imported seed potatoes. 8/ Largely beans. 9/ Conversion rates: 1 bunch bananas equals 7.0 kilograms. (Other sources indicate a bunch may be heavier than this, weighing up to 20 kilograms.) One plantain equals 0.33 kilogram. 10/ Data taken from 1965 Anuario and was not available at time of study completion. Data are largely estimates based on broilers incubated commercially and do not include home incubated poultry. Imports are considered to be negligible. 11/ Liquid milk equivalent, converted at 1.0276 kilograms per liter, excludes butter. 12/ Conversion rate used: one egg = 55 grams. 13/ Includes coconut oil and margarine but excludes soybean oil. 14/ Expressed in cocoa bean equivalent. 15/ Data 1950-58 include only cigarettes and cigars, data 1960-65 include only production and imports of unmanufactured tobacco as manufactured imports were negligible.

Sources: (1) Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela. Data for 1950-58 and projections taken from respective tables in study. (2) Anuario Estadistico Agropecuario 1965. Republica de Venezuela, Ministerio de Agricultura y Cria, Caracas, May 1966. Data, taken from respective tables for 1960-65, are close to but not always completely comparable to earlier data.

Table 12.--Per capita annual apparent disappearance, selected years 1950-65, and projected per capita domestic demand, 1965, 1970, and 1975, Venezuela, selected agricultural commodities

Commodity	Actual												Projected		
	1950	1952	1954	1956	1958	1960	1961	1962	(1962) 1/	1963	1964	1965	1965	1970	1975
	Kilograms												Kilograms		
Wheat and flour	33.3	33.6	35.6	43.1	43.4	43.6	48.0	40.8	2/	44.5	63.9	71.8	49.3	56.1	63.0
Corn	64.1	63.7	55.3	54.9	51.8	60.4	61.1	71.4	(31.5)	52.8	76.3	64.5	61.5	65.3	67.2
Rice, milled	7.3	5.8	5.6	3.7	9.3	10.1	8.5	9.0	(9.6)	10.6	12.7	14.8	10.2	10.3	10.5
Barley and malt	3.4	3.8	3.9	3.9	5.4	6.8	6.0	4.8	2/	5.2	5.3	5.0	6.8	7.9	9.1
Oats and products	2.0	2.1	2.3	2.4	2.6	2.2	2.3	2.2	(2.0)	2.0	2.2	2.2	2.6	2.7	2.7
Sugars	34.5	33.3	32.7	31.3	31.6	32.8	34.4	36.6	(27.6)	33.6	38.6	43.6	34.7	36.6	37.6
Potatoes	12.7	11.6	11.7	13.6	14.3	19.4	10.8	15.4	(14.4)	13.6	14.6	15.5	15.2	16.0	17.0
Cassava	27.2	38.1	32.7	28.6	27.4	46.8	18.4	41.1	(18.1)	42.0	36.8	34.3	39.2	39.2	39.2
Pulses	12.4	12.8	11.3	13.3	14.1	12.6	8.2	6.1	(10.0)	6.6	6.9	6.9	10.2	10.0	9.8
Bananas and plantains	81.1	91.7	85.0	85.9	75.9	103.9	83.6	98.8	(75.4)	125.3	119.6	125.2	87.7	88.9	89.9
Beef and veal	14.5	13.1	13.1	13.3	15.9	17.0	18.1	17.6	(17.2)	18.0	18.5	18.5	20.7	21.0	21.2
Pork	4.6	3.7	4.0	3.9	4.6	4.5	4.2	4.5	(2.8)	4.5	4.5	4.1	4.3	4.6	4.9
Poultry	4.0	0.9	1.5	1.6	2.1	3.0	4.0	4.2	3/(3.8)	4.4	5.4	5.1	4.6	4.8	5.1
Dairy products	50.1	74.4	86.3	130.7	98.7	95.1	95.4	97.2	(86.5)	97.3	93.0	88.7	113.9	121.4	125.3
Butter	1.1	0.8	0.8	0.8	0.7	0.7	0.5	0.5	(0.6)	0.4	0.4	0.5	0.6	0.7	0.7
Eggs	2.6	2.8	2.9	3.4	4.5	4.2	3.2	2.8	(3.4)	2.0	2.8	3.2	3.6	3.8	4.1
Edible vegetable fats and oils	4.2	4.8	5.9	6.2	7.4	8.6	9.1	9.9	(8.4)	10.3	10.8	10.2	9.5	10.2	10.9
Cocoa	0.5	0.5	0.8	0.9	0.9	0.9	1.0	1.0	2/	1.0	1.0	1.1	0.3	0.4	0.4
Coffee	3.9	3.5	3.6	3.6	3.7	3.9	3.9	3.8	(3.5)	3.5	3.2	4.1	3.8	3.9	4.1
Seed cotton	2.9	3.0	3.1	2.6	3.5	4.2	5.4	3.5	2/	4.9	5.9	9.9	4.9	5.1	5.4
Tobacco	0.8	1.0	1.1	1.4	1.1	1.4	1.5	1.1	2/	1.1	1.0	1.0	1.4	1.4	1.5

1/ Direct human consumption as determined by Family Survey, calculated from table 51, page 49, of study report. 2/ Data unavailable or presented in such a manner that it is not comparable. 3/ Cooking hens only.

Sources: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela. Data for 1950-58 and projections taken from respective tables or calculated from data provided in study. (2) Data for 1960-65 calculated from table 11 using the following population figures: 1960 = 7,274,000; 1961 = 7,556,000; 1962 = 7,849,000; 1963 = 8,154,000; 1964 = 8,470,000; 1965 = 8,778,000; 1970 = 10,201,000; and 1975 = 11,812,000.

Table 13.--Area included in farming units and principal land use on farms in Venezuela according to Agricultural Censuses II and III, 1950 and 1961 1/

Item	1950	1961	Intercensal increase
	Hectares		Percent
Total area in farms	22,126,640	26,214,824	18.5
Cultivated area	1,302,116	1,678,218	28.9
Permanent crops	592,919	652,973	10.1
Annual and semipermanent crops	709,197	1,025,245	44.6
Pastures	13,500,963	16,706,025	23.7
Cultivated	1,639,425	2,747,850	67.6
Natural	11,861,538	13,958,175	17.7
Fallow and idle croplands	1,334,334	2,446,980	83.3
Forests and woods	4,434,980	4,475,911	0.9
Other lands	1,554,247	907,689	-41.7

1/ Total area of Venezuela is 91,205,000 hectares, of which 88,205,000 hectares is land area. The total land area in farms in 1961 was less than 30 percent of the total land area of Venezuela.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, p. 116.

Table 14.--Land area under cultivation for selected agricultural crops in Venezuela, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Wheat	Corn	Rice	Sugar-cane	Potatoes	Cassava	Pulses 2/	Bananas	Plantains	Cocoa beans	Sesame	Coconut	Coffee	Cotton	Tobacco	Total
	1,000 hectares 3/															
Actual:																
1950	3	329	36	70	10	58	4/	108	80	73	2	27	335	8	7	1,210
1951	4/	4/	38	4/	4/	4/	4/	4/	4/	4/	4/	4/	4/	4/	4/	4/
1952	10	270	40	52	9	50	4/	96	42	70	8	26	322	16	6	1,062
1953	4	277	49	4/	11	53	86	4/	4/	4/	2	4/	4/	16	11	4/
1954	3	259	51	53	11	49	72	64	33	71	8	26	321	17	6	1,021
1955	3	257	62	4/	10	40	64	4/	34	4/	10	4/	4/	17	7	4/
1956	4	287	49	52	12	44	75	43	51	72	25	25	321	17	8	1,061
1957	4	283	30	53	13	45	80	4/	55	4/	24	4/	4/	21	6	4/
1958	4	297	12	52	10	40	77	44	50	71	40	26	308	32	6	1,041
1959	2	280	28	4/	14	43	88	4/	58	4/	50	4/	4/	44	5	4/
1960	2	298	42	52	18	61	148	46	66	72	45	26	303	55	7	1,292
1961	2	389	58	52	9	33	90	47	60	72	54	26	315	50	8	1,237
1962	2	483	69	43	16	5/ 26	68	40	86	4/	57	25	340	37	6	1,298
1963	1	426	73	47	15	25	81	68	79	4/	61	25	340	47	7	1,295
1964	2	443	91	52	15	25	92	56	93	4/	68	24	340	44	6	1,351
1965 6/	2	462	105	57	16	25	94	58	100	4/	87	23	340	46	6	1,421
Projected:																
1965	4/	410	75	54	19	4/	117	4/	4/	4/	90	4/	4/	47	19	4/
1970	4/	410	75	63	22	4/	122	4/	4/	4/	107	4/	4/	53	11	4/
1975	4/	440	75	73	26	4/	127	4/	4/	4/	137	4/	4/	58	13	4/

1/ Excludes study crops of barley, oats, and primary seed potatoes not produced in Venezuela. 2/ Black beans and other beans. 3/ Generally harvested area basis. 4/ Data unavailable or not projected. 5/ Data for 1962 through 1965 and possibly 1961 exclude areas seeded which are smaller than one-half hectare. 6/ Data are provisional and subject to revision.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 91, p. 118. Supplemented by author's calculations based on study projections, Agricultural Attaché reports, and data from Anuario Estadistico Agropecuario 1965.

Table 15.--Average yield per hectare for selected agricultural crops in Venezuela, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Wheat	Corn	Rice	Sugar-cane 2/	Potatoes	Cassava	Pulses	Bananas	Plantains	Cocoa beans	Sesame	Coffee	Cotton	Tobacco
	-Kilograms-													
Actual:														
1950. . .	3/	943	1,063	9,300	3,055	2,393	3/	2,254	2,050	237	361	115	1,013	989
1951. . .	3/	3/	1,058	3/	3/	3/	3/	3/	3/	3/	3/	3/	3/	3/
1952. . .	3/	1,270	1,233	16,099	2,588	4,155	3/	3,339	4,312	240	280	152	873	1,867
1953. . .	3/	1,210	1,182	3/	2,997	4,725	789	3/	3/	3/	804	3/	782	797
1954. . .	577	1,260	1,988	22,899	3,579	3,971	737	4,900	5,651	258	837	142	920	898
1955. . .	555	1,234	968	3/	4,491	3,887	791	3/	6,664	3/	907	3/	765	1,055
1956. . .	732	1,220	967	58,411	5,758	4,179	885	7,371	4,547	283	520	143	800	1,036
1957. . .	585	1,200	731	3/	8,325	4,233	854	3/	4,809	3/	530	3/	669	994
1958. . .	682	1,202	1,655	32,798	6,901	4,741	906	8,435	4,335	217	522	194	678	904
1959. . .	735	1,200	1,355	3/	6,426	5,032	803	3/	4,584	3/	398	3/	564	1,300
1960. . .	510	1,104	1,716	41,208	7,348	5,561	534	10,157	4,435	198	363	175	539	1,309
1961. . .	540	1,079	1,380	3/	7,935	4,277	491	7,518	4,724	3/	461	3/	723	1,375
1962. . .	525	1,118	1,495	42,849	7,584	12,543	508	7,707	5,527	3/	495	3/	647	1,385
1963. . .	523	1,008	1,779	3/	7,549	13,665	472	7,483	5,567	3/	502	3/	725	1,342
1964. . .	554	1,072	1,827	51,500	8,295	12,620	436	7,539	6,522	3/	681	3/	945	1,344
1965 4/ . .	581	1,128	1,902	59,000	8,403	12,290	449	7,378	6,815	3/	621	3/	971	1,391
Projected:														
1965. . .	3/	1,100	1,800	55,140	7,500	3/	600	3/	3/	3/	650	3/	800	1,350
1970. . .	3/	1,200	2,150	58,650	8,000	3/	650	3/	3/	3/	700	3/	850	1,350
1975. . .	3/	1,200	2,500	60,810	8,000	3/	700	3/	3/	3/	700	3/	900	1,350

1/ Excludes study commodities of barley, oats, and primary seed potatoes not produced in Venezuela. 2/ Includes cane destined for refined sugar. 3/ Data unavailable or not projected. 4/ Data are provisional subject to revision.

Source: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 92, p. 119, and tables 14 and 16 of this summary.

Table 16.--Total production of selected agricultural crops in Venezuela, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Wheat	Corn	Rice (paddy)	Sugara 2/	Potatoes	Cassava	Pulses	Bananas 3/	Plantains 4/	Cocoa beans	Sesame seed	Copra	Coffee	Seed cotton	Tobacco
	1,000 metric tons														
Actual:															
1950	5	310	39	128	29	138	49	252	165	18	8	5	39	8	7
1951	4	313	40	125	32	189	56	322	173	17	5	12	36	13	11
1952	6	343	49	145	24	209	56	322	182	18	2	15	49	14	11
1953	3	334	58	148	34	253	63	315	178	21	2	17	64	13	8
1954	2	326	102	157	40	194	53	315	188	21	7	14	47	16	5
1955	2	317	60	212	45	157	51	448	228	20	9	12	53	13	7
1956	3	350	47	265	70	183	66	313	232	23	13	17	46	14	8
1957	2	340	22	258	106	190	69	430	267	21	13	13	51	14	6
1958	3	358	19	219	70	189	70	370	217	19	21	8	60	22	5
1959	1	336	39	228	93	218	70	381	264	17	20	6	55	25	6
1960	1	439	72	238	134	340	79	466	293	19	16	7	53	30	9
1961	1	420	81	260	74	139	44	351	284	17	25	11	54	36	10
1962	1	540	103	288	121	323	35	306	473	19	28	12	49	24	8
1963	1	430	131	320	111	342	38	510	521	21	31	15	52	34	9
1964	1	475	166	333	124	312	40	421	604	21	47	17	47	41	8
1965 5/	1	521	200	385	136	301	42	430	681	22	54	15	54	45	9
Projected:															
1965	negl.	450	138	313	142	345	70	472	415	15	59	19	55	38	12
1970	negl.	490	162	373	175	400	80	535	507	15	75	25	56	45	14
1975	negl.	530	190	444	207	464	89	606	607	15	95	30	57	52	17
Compound annual rate of growth, 1965-75	Percent														
	n.a.	1.1	3.2	3.6	3.8	3.0	2.4	2.5	3.9	0	4.8	4.6	0.4	3.4	3.7

1/ Excludes study crops of barley, oats, and primary seed potatoes not produced in Venezuela. 2/ Includes both centrifugal sugar and noncentrifugal sugar. 3/ Converted from bunches; 7 kilograms per bunch. 4/ Converted from units; 0.33 kilograms per unit. 5/ Provisional data, subject to revision.

Sources: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, and Anuario Estadistico Agropecuario 1965.

Table 17.--Meat production, trade, and apparent disappearance in Venezuela, actual 1950-65, and projections for 1965, 1970, and 1975 1/

Year	Beef			Pork			Goat meat	Mutton	Poultry 2/	Total apparent disappearance 3/
	Production	Imports	Apparent disappearance	Production	Imports	Apparent disappearance	Production	Production	Production	
	1,000 metric tons									
Actual:										
1950	70.8	2.4	73.1	17.0	6.4	23.4	0.5	0.4	1.9	99.3
1951	70.7	....	70.7	15.4	4.4	19.8	0.4	0.4	2.6	93.9
1952	71.4	....	71.4	15.4	4.5	19.9	0.5	0.4	5.0	97.2
1953	76.2	....	76.2	18.7	4.3	23.0	0.6	0.4	6.6	106.8
1954	77.7	....	77.7	18.6	4.9	23.5	0.7	0.5	8.8	111.2
1955	82.2	....	82.2	18.0	4.9	22.9	0.9	0.6	8.9	115.5
1956	85.0	....	85.0	18.8	6.1	24.9	0.9	0.6	9.8	121.2
1957	95.5	....	95.5	21.4	6.9	28.3	1.1	0.5	11.6	137.0
1958	110.3	....	110.3	23.1	7.9	31.0	0.9	0.5	14.5	157.2
1959	116.3	1.9	118.2	24.5	7.7	32.2	0.8	7/ 0.4	20.5	172.1
1960	120.8	3.0	123.8	25.1	7.4	32.5	0.9	7/ 0.4	21.6	179.2
1961	136.5	negl.	136.5	26.0	6.0	32.0	1.1	7/ 0.4	30.6	200.6
1962	138.4	negl.	138.4	28.3	6/ 7.3	6/ 35.6	1.2	7/ 0.3	32.6	208.1
1963	147.0	negl.	147.0	28.1	6/ 8.3	6/ 36.4	1.5	7/ 0.4	36.2	221.5
1964	157.5	negl.	157.5	29.6	6/ 8.2	6/ 37.8	2.0	7/ 0.2	45.6	243.1
1965 4/	162.4	negl.	162.4	30.6	6/ 5.3	6/ 35.9	2.5	7/ 0.3	45.0	246.1
Projected:										
1965	160.3	21.9	182.1	35.0	2.8	37.8	....	....	40.9	260.8
1970	208.0	5.9	213.9	47.0	0.0	46.9	....	....	49.1	309.9
1975	261.0	5/(10.3)	250.7	58.0	0.0	58.1	....	....	60.3	369.1
	Percent									
Compound annual rate of growth, 1965-75	5.0	....	3.2	5.2	....	4.4	....	....	4.0	3.5

1/ Figures are on a carcass weight basis. 2/ The poultry series was estimated after the study was completed. Data earlier than 1961 were not available to the study group. Poultry consumption was estimated by the study to be 20,466 tons in 1961 and 21,640 tons in 1962, based on farm flocks of 50 or larger. However, the Family Survey indicated that perhaps 30,934 tons of poultry were consumed in 1962. 3/ Apparent disappearance equals production plus net trade. Projected totals exclude goat meat and mutton since no projections were made for these. 4/ Preliminary data. 5/ Exports of beef. 6/ Imports include only fresh, frozen, dried, salted, or smoked pork and ham. They may not be strictly comparable to the earlier series. 7/ Includes small amounts of imports.

Sources: Data for 1950-61 and projections for 1965, 1970, and 1975 generally taken from Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, table 67, p. 79, and table 124, p. 151. Data for 1962-65 and the whole series 1950-65 for poultry taken from Anuario Estadistico Agropecuario 1965.

Table 18.--Eggs and dairy products: Production, trade, and apparent disappearance in Venezuela, actual 1950-65, and projections for 1965, 1970, and 1975

Year	Eggs			Dairy products 1/							
				Milk			Butter		Cheese		Milk and cheese apparent disappearance, fresh milk equivalent 2/
					Dried or canned						
	Production for consumption	Imports for consumption	Apparent disappearance	Pasteurized	Domestic production	Imports	Domestic production	Imports	Domestic production	Imports	
	1,000 metric tons			1,000 metric tons							
Actual:											
1950	3.3	3/ 10.1	13.4	26.3	1.5	30.1	1.6	3.8	...	3.6	255.1
1951	3.5	3/ 8.7	12.2	36.8	1.7	24.8	1.3	1.8	...	3.6	233.9
1952	3.8	3/ 11.3	15.1	56.0	2.5	30.3	1.6	2.8	15.8	1.2	407.0
1953	4.0	3/ 11.1	14.1	72.7	3.3	32.3	2.2	0.9	15.9	4.5	468.7
1954	4.3	3/ 13.0	17.3	86.8	3.8	33.8	3.2	1.3	16.2	5.9	507.1
1955	4.3	3/ 15.7	20.0	99.2	3.8	36.9	3.3	0.4	16.2	5.8	439.1
1956	4.5	4/ 17.3	21.8	115.0	4.1	72.8	3.4	1.5	15.3	12.6	825.7
1957	4.7	4/ 24.2	28.9	130.6	4.5	41.8	4.0	negl.	12.6	7.0	586.1
1958	5.1	25.4	30.5	143.1	6.3	46.2	4.6	negl.	14.2	9.1	669.9
1959	9.1	24.9	34.0	153.1	7.4	42.4	4.4	negl.	14.8	10.6	681.4
1960	10.4	20.0	30.4	160.2	9.6	45.8	4.9	negl.	12.1	8.9	692.2
1961	15.0	9.0	24.0	165.5	12.2	41.7	3.7	negl.	13.3	11.3	721.0
1962	22.3	negl.	22.3	168.0	15.9	42.1	3.8	negl.	18.3	6.6	762.9
1963	16.5	negl.	16.5	183.8	20.9	39.8	3.6	negl.	17.7	5.6	793.3
1964	24.0	negl.	24.0	204.7	25.2	34.6	3.5	negl.	14.6	5.1	787.9
1965	27.9	negl.	27.9	168.4	30.2	35.2	4.6	negl.	15.3	1.9	779.0
Projected:											
1965	31.4	0	31.4	...	...	4/ 34.7	...	...	...	...	1,021.8
1970	39.2	0	39.2	...	...	4/ 41.5	...	...	...	...	1,237.6
1975	48.1	0	48.1	...	...	4/ 50.6	...	...	...	...	1,479.1
	Percent										
Compound annual rate of growth 1965-75	4.4	...	4.4	...	...	3.8	...	...	...	...	3.8

1/ Pasteurized milk and apparent consumption are expressed in liquid milk equivalent while dried or canned milk, cheese and butter are in metric tons of each product. All products except butter were converted to liquid milk equivalent and included in apparent consumption. 2/ Excludes raw milk and butter. Raw milk data are not available except that which goes to the factory for pasteurization. Butter is excluded from total following the study practice which considered it to be a byproduct of cheese and dried milk and included in the conversion rates used. 3/ Includes some hatching eggs. 4/ Projected milk deficit converted to nonfat dried milk.

Sources: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, and Anuario Estadistico Agropecuario 1965.

Table 19.--Net trade of selected agricultural products by Venezuela, selected years 1950-65, and projections for 1965, 1970, and 1975 1/

Commodity	Actual											Projected		
	1950	1952	1954	1956	1958	1960	1961	1962	1963	1964	1965	1965	1970	1975
	-1,000 metric tons-											-1,000 metric tons-		
Wheat 2/.	163.3	177.5	208.6	272.5	296.9	316.2	361.4	320.6	361.5	539.4	629.3	430.0	572.3	744.1
Corn.	13.7	4.9	0.4	0.7	0.6	0.3	43.4	19.7	0.2	171.0	45.0	91.2	175.9	263.5
Rice (paddy equivalent) 3/	44.6	5.0	3.6	negl.	59.2	41.5	17.8	5.8	1.8	negl.	negl.	0	0	0
Barley and malt 4/.	17.3	21.0	23.1	24.5	36.6	49.6	45.2	38.0	42.4	44.5	44.4	59.5	80.8	107.2
Oats and oat products	12.1	12.6	13.0	14.9	17.7	16.3	17.2	17.2	16.2	18.3	19.4	23.0	27.2	31.5
Sugar, centrifugal.	39.2	28.5	16.2	0.2	5.6	negl.	negl.	negl. 10/	(45.5)	(6.0)	(2.3)	0	0	0
Potatoes (seed)	5.7	8.0	6.1	16.6	9.4	9.1	14.6	8.8	9.6	8.1	13.0	22.3	27.3	33.4
Potatoes (food)	36.8	34.9	35.9	7.8	10.6	7.2	7.9	negl.	0.2	0	0	0	0	0
Pulses.	13.7	12.9	13.3	18.6	27.6	12.7	18.1	12.2	15.8	18.9	17.9	19.8	22.3	26.4
Bananas 5/.	(4.0)	(3.0)	(3.3)	(3.2)	(3.2)	(3.4)	(3.8)	(4.9)	(9.5)	(11.3)	(12.1)	(61.7)	(68.6)	(79.1)
Plantains												(54.2)	(66.1)	(71.9)
Beef and veal	2.4	-	-	-	-	3.0	negl.	negl.	negl.	negl.	negl.	21.9	5.9	(10.3)
Pork.	6.4	4.5	4.9	6.1	7.9	6.6	5.8	7.1	8.2	8.7	5.3	2.8	-	-
Milk 6/	205.9	200.7	256.6	283.1	358.7	354.2	345.8	314.0	292.8	255.8	236.7	387.2	463.8	564.6
Eggs.	10.1	11.3	13.0	17.3	25.4	20.0	9.0	negl.	negl.	-	-	0	0	0
Sesame.	3.9	10.8	5.0	2.9	11.2	13.7	15.8	21.0	14.3	15.0	7.8	0	0	0
Copra 7/.	21.7	17.0	39.0	23.0	41.9	46.5	43.5	50.9	38.8	48.3	47.6	48.3	57.8	69.7
Cottonseed oil.	-	-	-	-	-	0.6	2.2	6.1	9.8	11.7	8.5	5.1	6.3	7.7
Cocoa beans	(15.7)	(15.1)	(16.3)	(17.9)	(13.4)	(11.8)	(9.7)	(10.8)	(12.6)	(12.1)	(12.1)	(12.0)	(11.4)	(10.6)
Coffee.	(18.5)	(29.9)	(25.9)	(23.2)	(35.1)	(24.5)	(24.4)	(19.2)	(23.4)	(19.6)	(17.9)	(21.3)	(15.9)	(9.0)
Cotton 8/	2.8	1.2	1.9	3.6	1.6	1.0	4.7	3.4	5.8	8.4	7.3	5.4	7.4	11.2
Tobacco 9/.	1.5	2.1	3.0	4.8	3.0	0.2	0.8	0.3	0.2	0.1	0.1	0	0	0

1/ Excludes cassava, for which no trade was reported or projected. 2/ Includes flour in wheat equivalent: 0.70 kilogram flour = 1.00 kilogram wheat. 3/ Conversion rates, milled to paddy: 1944-49 = 1.5865; 1950-58 = 1.5625; and 1960-75 = 1.5384. 4/ Imported malt converted to barley equivalent: 1.04 kilograms malt = 1.00 kilogram barley. 5/ Data 1950-65 do not separate banana and plantain exports. Projections for 1965-75 were made separately in bunches and units: 1 bunch banana = 7.0 kilograms; 1 plantain = 0.33 kilogram. 6/ Liquid milk equivalent converted at 1.0276 kilograms per liter; data excludes butter imports. 7/ Data 1950-58 include copra or coconut while more recent data include only copra. 8/ Data 1950-65 include various classifications of cotton such as raw and fiber with no adjustment for their differences. 9/ Data 1950-58 include only cigarettes and cigars; data 1960-65 include only unmanufactured tobacco since in this period imports of manufactured tobacco were negligible. 10/ Parentheses indicate exports.

Sources: Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela; data for 1950-58 and projections taken from respective tables in study. Anuario Estadistico Agropecuario 1965; data taken from respective tables for 1960-65 are close to but not always completely comparable to earlier data. Data for 1965 are preliminary and subject to revision.

Table 20.--U.S. trade with Venezuela, 5-year averages 1940-64 and annual 1960-65

Year	U.S. Imports			U.S. Exports		
	Total	Agriculture	Agriculture as percentage of total	Total	Agriculture	Agriculture as percentage of total
	Mil. dollars		Percent	Mil. dollars		Percent
5-year averages:						
1940-44	37.9	9.8	26	62.6	9.3	15
1945-49	180.1	24.0	13	360.7	46.7	13
1950-54	396.2	41.5	10	476.0	70.4	15
1955-59	789.0	35.7	5	753.8	80.1	11
1960-64	936.8	19.5	2	524.4	79.6	15
Annual:						
1960	941.7	22.4	2	547.6	92.2	17
1961	877.0	19.6	2	507.4	89.6	18
1962	970.1	16.1	2	465.8	65.0	14
1963	937.7	19.6	2	504.3	67.7	13
1964	957.5	19.8	2	596.9	83.5	14
1965	1,024.3	17.7	2	621.0	75.9	12
1966 1/	1,024.7	22.4	2	591.7	82.0	14

1/ Preliminary.

Source: U.S. Bureau of the Census.

Table 21.--U.S. agricultural trade with Venezuela, annual 1960-65

Trade commodities	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	Million dollars						Percent 7/					
U.S. exports to Venezuela:												
Total 1/	92.2	89.6	65.0	67.7	83.5	75.9	1.9	1.8	1.3	1.2	1.3	1.2
Wheat and wheat flour 1/	15.6	19.2	12.2	13.8	20.0	18.6	1.5	1.5	1.1	1.0	1.3	1.6
Rice, milled 1/	1.0	0.2	0.1	5/	5/	5/	0.7	0.2	0.1	6/	6/	6/
Feed grains 1/ 2/	0.1	1.8	1.0	0.1	6.0	3.5	6/	0.3	0.1	6/	0.7	0.3
Dairy products 1/	19.7	14.8	9.4	7.3	6.9	5.9	16.8	11.0	7.2	4.0	3.1	3.0
Poultry meat	0.1	5/	5/	5/	5/	5/	0.2	6/	6/	6/	6/	6/
Other meats and products	5.2	3.2	2.4	2.2	4.0	1.6	8.0	4.9	3.9	2.5	3.5	1.5
Hides and skins	0.6	0.9	0.8	0.9	0.5	0.8	0.8	1.0	1.0	1.2	0.5	0.7
Animal fats and oil	0.7	1.1	1.1	1.1	2.6	1.6	0.4	0.6	0.7	0.6	1.0	0.7
Vegetable fats and oils 1/3/	3.3	3.9	3.0	3.3	4.3	6.8	1.8	2.6	1.5	1.8	1.7	2.4
Oilseeds	0.7	1.5	1.6	1.5	3.3	3.2	0.2	0.4	0.4	0.3	0.5	0.5
Oilcake and meal	0.6	1.3	0.8	1.4	0.7	0.1	1.3	2.7	0.9	1.1	0.5	6/
Nuts and preparations	0.7	0.5	0.5	0.6	0.7	0.8	3.3	4.2	3.2	2.8	2.6	1.8
Fruits and preparations	11.0	9.1	7.5	7.3	8.1	7.4	4.4	3.3	2.6	2.6	2.9	2.4
Vegetables and preparations 1/	5.7	6.5	5.7	6.7	6.2	5.1	4.1	5.2	3.9	3.9	3.9	3.3
Cotton, excluding linters	0	2.6	0.1	1.6	1.3	1.2	0	0.3	6/	0.3	0.2	0.2
Tobacco, unmanufactured	1.5	0.7	0.8	0.1	0.2	0.1	0.4	0.2	0.2	6/	6/	6/
Others 1/ 4/	25.6	22.3	18.0	19.7	18.7	19.1	8.8	6.8	4.7	4.4	4.1	4.4
	Million dollars						Percent 7/					
U.S. imports from Venezuela:												
Total	22.4	19.6	16.1	19.6	19.8	17.7	0.6	0.5	0.4	0.5	0.5	0.4
Coffee	18.0	16.1	12.1	13.5	14.6	13.5	1.8	1.7	1.2	1.4	1.2	1.3
Cocoa beans	3.9	2.2	2.6	3.1	3.3	2.0	2.7	1.4	2.0	2.3	2.5	1.6
Others	0.5	1.3	1.4	3.0	1.9	2.2	6/	6/	6/	0.1	0.1	0.1

1/ Includes food exported for relief or charity by individuals and public agencies. 2/ Feed grains are barley, corn, oats and grain sorghums but excluding products. 3/ Excludes essential oils which are included in "other." 4/ Others are mainly feeds and fodders, field and garden seeds, coffee, hops, essential oils, sugar and related products and live animals. 5/ Less than $50,000. 6/ Less than 0.05 percent. 7/ U.S. trade with Venezuela as a percent of total U.S. trade of each given commodity.

Source: U.S. Bureau of the Census.

Table 22.--Venezuela: Imports of selected agricultural commodities, by major country of origin and by percentage share supplied by the major countries, 1960-1965

Commodity and major country	Imports						Percentage share of total imports					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 bolivares						Percent					
Commodities where U.S. supplied a decreasing share of the Venezuelan market:												
Milk & milk products 1/. . .	123,520	144,464	132,160	123,971	133,877	141,074	100.0	100.0	100.0	100.0	100.0	100.0
United States.	40,269	25,635	15,659	16,956	20,749	18,795	32.6	17.7	11.8	13.7	15.5	13.3
Netherlands.	28,827	33,608	31,066	29,150	29,297	26,151	23.3	23.3	23.5	23.5	21.9	18.5
Denmark.	22,918	29,787	28,678	21,925	23,542	23,361	18.6	20.6	21.7	17.7	17.6	16.6
Canada	30,253	38,975	35,044	28,474	36,146	45,976	24.5	27.0	26.5	23.0	27.0	32.6
All others	1,253	16,459	21,713	27,466	24,143	26,791	1.0	11.4	16.5	22.1	18.0	19.0
Wheat & wheat products . . .	66,808	85,660	77,924	97,982	164,629	171,862	100.0	100.0	100.0	100.0	100.0	100.0
United States.	48,708	69,970	37,428	50,422	83,134	90,436	72.9	81.7	48.0	51.5	50.5	52.6
Canada	16,670	13,934	35,970	45,198	78,343	71,917	24.9	16.3	46.2	46.1	47.6	41.8
Argentina.	1,049	1,572	4,455	2,286	3,049	5,465	1.6	1.8	5.7	2.3	1.9	3.2
All others	381	184	71	76	103	4,044	0.6	0.2	0.1	0.1	4/	2.4
Cotton fiber	2,437	13,090	7,178	15,026	25,256	32,821	100.0	100.0	100.0	100.0	100.0	100.0
United States.	2,057	11,376	2,641	6,026	7,199	8,147	84.4	86.9	36.8	40.1	28.5	24.8
Peru	0	429	2,914	7,498	13,250	22,457	-	3.3	40.6	49.9	52.5	68.4
All others	380	1,285	1,623	1,502	4,807	2,217	15.6	9.8	22.6	10.0	19.0	6.8
Barley malt.	18,166	22,866	21,006	20,664	22,614	26,365	100.0	100.0	100.0	100.0	100.0	100.0
United States.	12,303	14,196	11,423	9,743	11,935	13,057	67.7	62.1	54.4	47.1	52.8	49.5
Czechoslovakia	1,159	2,464	2,777	3,866	3,856	5,006	6.4	10.8	13.2	18.7	17.1	19.0
All others	4,704	6,206	6,806	7,055	6,823	8,302	25.9	27.1	32.4	34.2	30.1	31.5
Feed for animals 2/.	9,709	13,679	13,246	17,954	19,632	18,557	100.0	100.0	100.0	100.0	100.0	100.0
United States.	8,145	10,096	7,688	9,902	9,460	6,462	83.9	73.8	58.0	55.2	48.2	34.8
Peru	1,288	1,975	2,605	2,504	7,604	8,036	13.3	14.4	19.7	13.9	38.7	43.3
All others	276	1,608	2,953	5,548	2,568	4,059	2.8	11.8	22.3	30.9	13.1	21.9
Oats & oat products.	9,788	10,943	11,079	9,262	7,970	7,091	100.0	100.0	100.0	100.0	100.0	100.0
United States.	5,271	5,941	5,406	1,216	1,251	1,976	53.8	54.3	48.8	13.1	15.7	27.9
Canada	1,720	1,531	2,480	4,192	4,190	3,602	17.6	14.0	22.4	45.3	52.6	50.8
Netherlands.	2,419	3,254	2,972	3,482	2,479	724	24.7	29.7	26.8	37.6	31.1	10.2
All others	378	217	221	372	50	789	3.9	2.0	2.0	4.0	0.6	11.1
Hops 2/.	1,488	2,610	3,602	3,195	3,065	3,007	100.0	100.0	100.0	100.0	100.0	100.0
United States.	598	1,486	1,718	1,671	1,254	1,079	40.2	56.9	47.7	52.3	40.9	35.9
Yugoslavia	70	446	995	1,222	1,436	1,364	4.7	17.1	27.6	38.2	46.9	45.3
Czechoslovakia	154	100	39	22	374	381	10.3	3.8	1.1	0.7	12.2	12.7
All others	666	578	850	280	0	183	44.8	22.2	23.6	8.8	0	6.1
Unmanufactured tobacco . . .	10,517	7,959	6,757	3,021	1,717	1,284	100.0	100.0	100.0	100.0	100.0	100.0
United States.	9,236	6,339	5,648	2,032	681	855	87.8	79.7	83.6	67.3	39.7	66.6

Table 22.--Venezuela: Imports of selected agricultural commodities, by major country of origin and by percentage share supplied by the major countries, 1960-1965--Continued

Commodity and major country	Imports						Percentage share of total imports					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 bolivares						Percent					
Turkey	510	844	976	557	920	419	4.9	10.6	14.4	18.4	53.6	32.6
All others	771	776	133	432	116	10	7.3	9.7	2.0	14.3	6.7	0.8
Potatoes (seed)	2,970	3,279	2,693	2,424	2,131	9,462	100.0	100.0	100.0	100.0	100.0	100.0
United States	865	402	86	6	120	20	29.1	12.2	3.2	0.3	5.6	0.2
Canada	1,941	2,843	1,968	2,301	1,744	8,936	65.4	86.7	73.1	94.9	81.9	94.4
All others	164	34	639	117	267	506	5.5	1.1	23.7	4.8	12.5	5.4
Barley (excluding malt)	2,531	494	496	359	326	215	100.0	100.0	100.0	100.0	100.0	100.0
United States	100	152	211	110	41	16	3.9	30.7	42.6	30.6	12.7	7.4
Netherlands	94	169	71	158	126	106	3.7	34.1	14.3	43.9	38.7	49.3
Canada	43	37	162	40	41	67	1.7	7.5	32.6	11.0	12.5	31.2
All others	60	136	52	51	118	26	2.4	27.7	10.5	14.5	36.1	12.1
Commodities where U.S. supplied a relatively constant percentage share of the Venezuelan market: 3/												
Fresh fruits and nuts 2/	27,447	28,637	31,254	25,692	29,829	33,042	100.0	100.0	100.0	100.0	100,0	100.0
United States	19,431	16,604	19,657	14,945	21,476	21,668	70.8	58.0	62.9	58.2	72.0	65.6
Argentina	5,112	8,213	7,562	8,177	4,869	7,241	18.6	28.7	24.2	31.8	16.3	21.9
Spain	1,081	1,494	1,643	1,340	1,958	2,214	3.9	5.2	5.3	5.2	6.6	6.7
All others	1,823	2,326	2,392	1,230	1,526	1,919	6.7	8.1	7.6	4.8	5.1	5.8
Pork	27,017	24,151	25,372	30,145	32,915	22,170	100.0	100.0	100.0	100.0	100.0	100.0
United States	4,127	8,937	7,727	8,121	16,840	6,691	15.3	37.0	30.5	26.9	51.2	30.2
Denmark	9,615	6,691	11,161	16,478	10,213	13,279	35.6	27.7	44.0	54.7	31.0	59.9
All others	13,275	8,523	6,484	5,546	5,862	2,200	49.1	35.3	25.5	18.4	17.8	9.9
Dried, canned, and prepared fruits	23,334	25,234	21,190	16,792	21,302	19,918	100.0	100.0	100.0	100.0	100.0	100.0
United States	18,589	20,310	14,955	9,644	14,159	16,364	79.7	80.5	70.6	57.4	66.5	82.2
Spain	2,851	2,154	5,983	4,685	2,628	2,676	12.2	8.5	28.2	27.9	12.3	13.4
All others	1,894	2,770	252	2,463	4,515	878	8.1	11.0	1.2	14.7	21.2	4.4
Beans, dried and fresh	10,434	12,508	9,248	13,908	18,366	15,445	100.0	100.0	100.0	100.0	100.0	100.0
United States	6,939	8,305	8,188	12,310	10,359	9,232	66.5	66.4	88.5	88.5	56.4	59.8
Mexico	22	-	739	-	7,712	6,051	0.2	-	8.0	-	42.0	39.2
All others	3,473	4,203	321	1,598	295	162	33.3	33.6	3.5	11.5	1.6	1.0
Cottonseed oil	651	2,742	6,946	10,943	14,166	25,113	100.0	100.0	100.0	100.0	100.0	100,0
United States	640	2,742	6,946	10,943	14,166	25,108	98.3	99.9	99.9	100.0	100.0	100.0

Table 22.--Venezuela: Imports of selected agricultural commodities, by major country of origin and by percentage share supplied by the major countries, 1960-1965--Continued

Commodity and major country	Imports						Percentage share of total imports					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 bolivares						Percent					
Animal fats and oils	2,334	3,303	4,585	3,683	9,183	9,847	100.0	100.0	100.0	100.0	100.0	100.0
United States	1,985	3,058	4,445	3,429	8,646	7,817	85.0	92.6	97.0	93.1	94.2	79.4
All others	349	245	140	254	537	2,030	15.0	7.4	3.0	6.9	5.8	20.6
Corn	4,190	7,077	8,140	2,118	47,762	13,931	100.0	100.0	100.0	100.0	100.0	100.0
United States	3,787	3,082	7,819	2,110	28,620	13,356	90.4	43.5	96.1	99.6	59.9	95.9
Mexico	-	-	-	-	18,932	-	-	-	-	-	39.6	-
All others	403	3,995	321	8	210	575	9.6	56.5	3.9	0.4	0.5	4.1
Live animals 2/	10,494	4,215	5,268	9,413	10,459	12,133	100.0	100.0	100.0	100.0	100.0	100.0
United States	8,337	3,915	4,462	9,093	9,292	10,955	79.4	92.9	84.7	96.6	88.9	90.3
All others	2,157	300	806	320	1,167	1,178	20.6	7.1	15.3	3.4	11.1	9.7
Peas, dried and fresh 2/	4,123	4,123	6,230	7,444	9,821	6,424	100.0	100.0	100.0	100.0	100.0	100.0
United States	3,069	2,355	5,293	5,339	8,576	5,117	74.4	57.1	85.0	71.7	87.3	79.7
Portugal	626	-	758	1,992	1,035	829	15.2	-	12.2	26.8	10.5	12.9
All others	428	1,768	179	113	210	478	10.4	42.9	2.8	1.5	2.2	7.4
Other meats and preparations	30,741	8,146	4,290	1,738	1,126	3,231	100.0	100.0	100.0	100.0	100.0	100.0
United States	14,628	3,452	2,087	1,226	469	297	47.6	42.4	48.6	70.5	41.7	9.2
France	107	76	193	126	161	246	0.3	0.9	4.5	7.3	14.3	7.6
Brazil	9	30	197	negl.	121	-	4/	0.4	4.6	negl.	10.7	-
All others	15,997	4,588	1,813	386	375	2,688	52.1	56.3	42.3	22.2	33.3	83.2
Rice	13,691	4,530	2,072	281	156	negl.	100.0	100.0	100.0	100.0	100.0	100.0
United States	3,467	2,257	692	281	156	negl.	25.3	49.8	33.4	99.9	99.9	negl.
All others	10,224	2,273	1,380	-	-	-	74.7	40.2	66.6	negl.	negl.	100.0
Potatoes (food)	1,957	1,364	15	110	327	1	100.0	100.0	100.0	100.0	100.0	100.0
United States	1,299	12	15	94	13	1	66.4	0.9	94.3	85.5	3.8	100.0
Canada	654	1,352	0	0	315	0	33.4	99.1	0	0	96.2	0
All others	4	0	1	16	0	0	0.2	0	5.7	14.5	0	0
Manufactured tobacco	2,472	332	168	136	170	136	100.0	100.0	100.0	100.0	100.0	100.0
United States	2,173	242	46	36	69	83	87.9	72.9	27.5	26.1	40.7	61.0
Netherlands	31	22	16	45	38	24	1.3	6.5	9.3	33.2	22.6	17.7
All others	268	68	106	55	63	29	10.8	20.6	63.2	40.7	36.7	21.3
Beef	7,071	509	371	303	56	49	100.0	100.0	100.0	100.0	100.0	100.0
United States	212	278	305	141	37	36	3.0	54.6	82.3	46.6	66.5	73.5
All others	6,859	231	66	162	19	13	11.8	45.4	17.7	53.4	33.5	26.5

Table 22.--Venezuela: Imports of selected agricultural commodities, by major country of origin and by percentage share supplied by the major countries, 1960-1965--Continued

Commodity and major country	Imports						Percentage share of total imports					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 bolivares						Percent					
Commodities where U.S. supplied an increasing percentage share of the Venezuelan market:												
Eggs	44,777	31,346	13,927	12,396	10,021	6,869	100.0	100.0	100.0	100.0	100.0	100.0
United States	25,859	21,618	13,512	12,355	10,004	6,608	57.8	70.0	97.0	99.7	99.8	96.2
All others	18,918	9,728	415	41	17	261	42.2	30.3	3.0	0.3	0.2	3.8
Vegetable oils excluding cottonseed oil	5,171	6,382	7,552	8,289	9,103	19,916	100.0	100.0	100.0	100.0	100.0	100.0
United States	650	810	935	1,126	2,599	6,276	12.6	12.7	12.4	13.6	28.6	31.5
Netherlands	199	2,216	2,839	3,616	2,093	4,705	3.9	34.7	37.6	43.6	23.0	23.6
All others	1,719	3,356	3,778	3,547	4,411	8,935	33.2	52.6	50.0	42.8	48.4	44.9
Total all commodities	463,838	469,643	422,769	437,249	595,979	599,963	100.0	100.0	100.0	100.0	100.0	100.0
Total all commodities from U.S.	242,744	243,570	184,992	189,277	281,305	270,452	52.3	51.9	43.7	43.3	47.2	45.1
Total all study commodities	387,243	391,145	341,979	356,759	501,871	506,882	100.0	100.0	100.0	100.0	100.0	100.0
Total study commodities from U.S.	184,575	188,804	131,219	138,683	217,088	208,807	47.7	48.3	38.4	38.9	43.3	41.2
Total study commodities as a percent of all commodities							83.5	83.3	80.9	81.6	84.2	84.5
Total study commodities from the U.S. as a percent of all commodities from the U.S.							76.0	77.5	70.9	73.3	77.2	77.2

1/ Includes milk and milk products, prepared milk, butter and cheese; excludes milky products (largely dietetic foods). 2/ Commodity not included in the study. 3/ At least no trend was readily apparent. 4/ Less than 0.1 percent.

Source: Computed from Boletin de Comercio Exterior (s) 1961, 1962, 1963, 1964, and 1965. Ministerio de Fomento Direccion General de Estadistics y Censos Nacionales, Republic de Venezuela.

Table 23.--Domestic demand, supply, and import demand or export availability for selected agricultural products in Venezuela, actual 1963-65, and projections for 1965, 1970, and 1975

Commodities	Apparent demand 1/						Domestic supply						Imports or (exports)					
	Actual			Projected			Actual			Projected			Actual			Projected		
	1963	1964	1965	1965	1970	1975	1963	1964	1965	1965	1970	1975	1963	1964	1965	1965	1970	1975
	1,000 metric tons						1,000 metric tons						1,000 metric tons					
Export commodities:																		
Bananas 2/	510	422	430	410	466	527	510	421	430	472	535	606	(10)	(11)	(12)	(62)	(69)	(79)
Plantains 2/	521	604	681	361	441	535	521	604	681	415	507	607				(54)	(66)	(72)
Cocoa beans	8	8	10	3	4	4	21	21	22	15	15	15	(13	(12)	(12)	(12)	(11)	(11)
Coffee	29	27	36	34	40	48	52	47	54	55	56	57	(23)	(20)	(18)	(21)	(16)	(9)
Import commodities:																		
Wheat and wheat flour 3/	363	541	631	430	572	744	1	1	1	negl.	negl.	negl	362	539	629	430	572	744
Corn	430	646	566	541	666	793	430	475	521	450	490	530	negl.	171	45	91	176	263
Barley and malt 3/	45	44	44	60	81	107	0	0	0	0	0	0	42	44	44	60	81	107
Oats and oat products 3/	16	18	19	23	27	31	0	0	0	0	0	0	16	18	19	23	27	31
Pulses 4/	54	60	60	90	102	115	38	40	42	70	80	89	16	19	18	20	22	26
Dairy products 5/	793	788	779	1,022	1,238	1,479	501	532	542	635	744	915	292	237	237	387	464	565
Beef and veal	147	158	162	182	214	251	147	158	162	160	208	261	negl.	negl.	negl.	22	6	(10)
Pork	36	38	36	38	47	58	28	30	31	35	47	58	8	8	5	3	0	0
Vegetable fats and oils 6/	84	91	90	83	104	129	39	37	45	43	54	67	45	54	45	41	50	62
Seed potatoes	10	8	13	22	27	33	0	0	0	0	0	0	10	8	13	22	27	33
Lint cotton 7/	16	20	22	15	18	22	10	12	15	13	15	18	6	8	7	2	3	4
Other commodities:																		
Rice, milled	86	108	130	90	105	124	85	108	130	90	105	124	2	negl.	negl.	0	0	0
Sugars	274	339	387	313	373	444	320	333	385	313	373	444	(46)	(6)	(2)	0	0	0
Potatoes, food	111	124	136	134	164	201	111	124	136	142	175	207	negl.	negl.	negl.	0	0	0
Cassava	342	312	301	345	400	464	342	312	301	345	400	464	0	0	0	0	0	0
Eggs	17	24	28	31	39	48	17	24	28	31	39	48	negl.	negl.	0	0	0	0
Poultry meat	36	46	45	41	49	60	36	46	45	41	49	60	negl.	negl.	negl.	0	0	0
Tobacco	9	9	9	12	14	17	9	8	9	12	14	17	negl.	negl.	negl.	0	0	0

1/ Apparent demand = apparent disappearance = production + net trade. 2/ Apparent demand for bananas and plantains includes exports since export data are not given separately. 3/ Expressed in grain equivalent. 4/ Largely beans. 5/ Expressed in whole milk equivalent, excludes raw milk and butter. 6/ Includes oil produced from raw products, as well as butter, margarine, and others. 7/ Converted from seed cotton at 34 percent; imports include various classifications of cotton.

Source: Compiled from tables 11, 16, 17, and 18.

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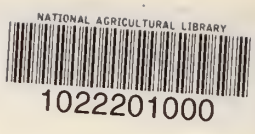

STATUS OF LONG-RANGE SUPPLY AND DEMAND STUDIES AND SUMMARY REPORTS IN THE WESTERN HEMISPHERE AT THE TIME OF PRINTING OF SUMMARY REPORT NUMBER TWO

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Venezuela

Study Report and Summary Report Available

Mexico

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